Projects Basic Processes Part One

Student Guide

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Overview of Oracle Projects

Chapter 1

Overview of Oracle Projects

Section Objectives

At the end of this section, you should be able to:

- Create indirect projects

- Create project cost budgets

- Enter project costs

- Process costs

- Analyze and report project status

Overview of Oracle Projects

- Create Capital projects

- Create contract projects

- Enter agreements and funding

- Create revenue budgets

- Generate revenue

- Create and adjust invoices

- Analyze and report project status

Oracle Projects Features

- Oracle Projects is composed of:
    - Project-tracking tools
    - Cost collection and calculation capabilities
    - Project asset creation
    - Flexible revenue accrual and invoicing functions
    - Online reporting and hard-copy reporting
    - Full adjustment capabilities
    - Integration with other Oracle and non-Oracle financial applications

Overview of Oracle Projects

How you set up your application affects the processing of transactions charged to the projects.

You define a project and work breakdown structure (WBS) to record work and process transactions as you and your agency require.

Project definitions can be simple or complex, depending on your requirements.

- Creating new projects

- Classification information

- Work Breakdown Structure (WBS)

- Charge Controls

- Costing overrides

- Revenue and billing information

- Single- or multiple-organization implementation

- Function or project security requirements

Purpose of Oracle Projects

The purpose of Oracle Projects is to track and control work (or activity) on a project.

- You track activity on a project by comparing actual activity with expected activity.

- Record actual activity as *actuals* (transactions).

- Record expected activity in a *budget*.

Project Definition

A project is a unit of work made up of one or more tasks. For example, you can use projects to track:

Indirect Work

- Track cost of indirect work

- Reduce costs and allocate indirect costs

- Research and Development

- Indirect projects

Product/Asset Development

- Track cost of product/asset development/asset construction

- Capitalize cost as an asset

- Capital projects

Services

- Bill services performed
  for customers

- Contract projects

Overview of Oracle Projects

Project Definition

Project Types

- Indirect work is usually, but not always, charged to an indirect project type.

- Asset development/construction is usually charged to a capital project type.

- Any project where you will bill the customer *must* be charged to a contract project type.

Project Classes

Project Classes

You can use three predefined project classes to track the following types of information:

- Indirect projects

  Track overhead activities and costs.

- Capital projects

  Track product/asset development and construction activities and costs. Costs are capitalized as one or more assets.

- Contract projects

  Track activities, cost, revenue, and billing for work performed for and reimbursed by a customer.

Caution

These three project classes are predefined; you cannot change or add to them. Within each project class, you can define as many project types as you need.

Billing Accounting Flow

Comprehensive Online Inquiry and Reporting

Identify business terms and rules	Define projects	Collect costs	Recognize revenue	Generate invoices

Define projects
- Enter project and tasks
- Enter agreements
- Fund project
- Enter revenue budget
- Baseline budget

Recognize revenue
- Enter revenue events
- Interface / Generate revenue
- Update project summary

Generate invoices
- Enter invoice Events
- Generate invoices
- Interface / Approve invoice
- Print customer invoice

Adjustments

Overview of Oracle Projects

Agreements and Funding

```
                        ┌─────────────────┐
                        │   Agreement     │
                        │  Total $500K    │
                        │  Funded $300K   │
                        └─────────────────┘
                   $150K        $50K        $100K
   ┌──────────────┐  ┌──────────────┐  ┌──────────────┐  ┌──────────────┐
   │  Project A   │  │  Project B   │  │  Project C   │  │  Project D   │
   │ Bid & Proposal│ │Time & Material│ │ Fixed Price  │  │  Cost Plus   │
   └──────────────┘  └──────────────┘  └──────────────┘  └──────────────┘
```

| Task 1 | Task 2 | Task 3 |

| Subtask 1.1 | Subtask 1.2 | | Subtask 3.1 | | Subtask 3.2 |

| Subtask 3.1.1 | Subtask 3.1.2 |

This diagram depicts an agreement funding Multiple Projects. It shows the WBS for only Project B.

Overview of Oracle Projects
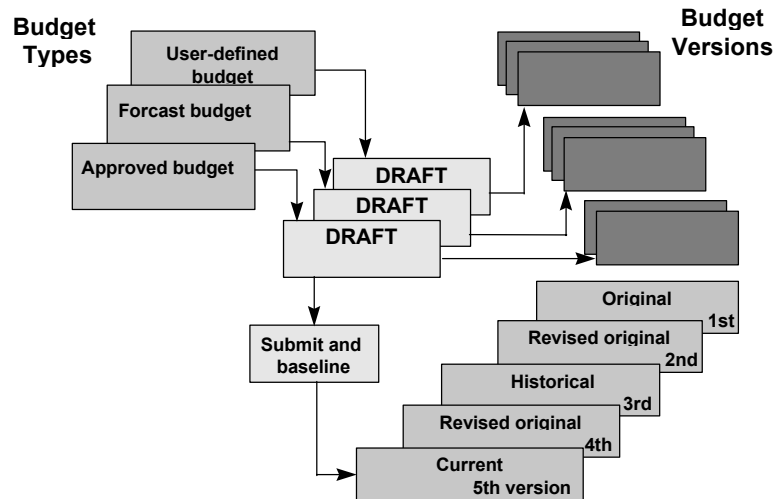
Budgets

Budget Versions

Oracle Projects maintains a version history of all baselined budgets for each budget type. These versions can be grouped into the following kinds:

- Original: First baselined budget; can be subsequently revised

- Current: Most recently baselined budget

- Revised original: Current and historical revisions of the original budget

- Historical: Historical copies of previously baselined budgets that are not original or current

The current and original (or revised original) versions are used in reporting.

Analysis and Reporting

Predefined and user-defined revenue/billing algorithms

Online analysis

Hard-copy reporting
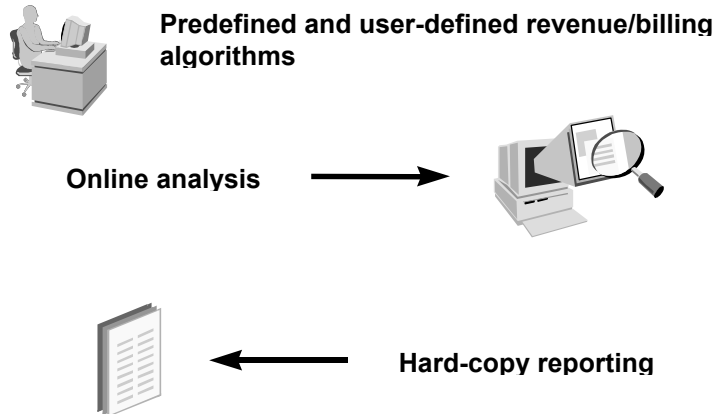
Tracking the Project Status

Oracle Projects uses Project Status Inquiry (PSI), a powerful online tool that allows different users to view and analyze data in the way that is most meaningful to their job role.

For example, project managers may want to see the lowest level cost detail, and financial managers may want to display just the cost rollup.

Online Inquiry and Reporting

- To ensure project control and profitability, you need immediate information for informed decision making. You can analyze project data at any point and make adjustments easily, while maintaining a full audit trail.

- Oracle Projects also includes a powerful feature called Project Status Inquiry (PSI).
    - PSI is an online reporting tool that allows you to compare actuals and commitments to budget by time period and review variances.

Analysis and Reporting

- PSI also provides drilldown functionality, so you can drill down from lowest tasks and resources to commitments and expenditures item details.

- Although Oracle Projects provides standard project management reports, you can avoid reviewing pages of reports and instead manage by exception.

- Oracle Projects also provides database views so that you can easily create your own custom reports.

Project Costing Flow

```
┌─────────────────────────────────────────────────────────────────────────────┐
│                  Comprehensive online inquiry and reporting                   │
└─────────────────────────────────────────────────────────────────────────────┘
     ▲              ▲                        ▲                         ▲
┌──────────┬───────────────┬──────────────────────────────┬─────────────────────┐
│ Identify │ Define        │        Collect costs         │ Place asset         │
│ business │ projects      │                              │ in service          │
│ terms    │               │                              │  ┌──────────────┐   │
│ and rules│               │    ┌────────┐                │  │ Generate     │   │
│          │   ┌────────┐  │    │ Enter  │                │  │ asset lines  │   │
│          │   │ Define │  │    │ Reqs/  │   ┌─────────┐  │  └──────────────┘   │
│          │   │ assets │  │    │ POs in │ ┌─────┐Interface│         │          │
│          │   └────────┘  │    │ PO     │ │Enter│        │  ┌──────────────┐   │
│          │               │    └────────┘ │supp-│ Import │  │ Review       │   │
│          │  ┌────────┐   │               │lier │ to G/L │  │ and adjust   │   │
│          │  │ Enter  │   │  ┌──────────┐ │invoi│        │  │ asset lines  │   │
│          │  │ project│   │  │ External │ └─────┘        │  └──────────────┘   │
│          │  └────────┘   │  │ transact.│→Transaction     │         │          │
│          │               │  └──────────┘  import         │  ┌──────────────┐  │
│          │ ┌──────┐ ┌────┐│  ┌─────────┐ ┌──────┐        │  │ Interface    │  │
│          │ │Enter │ │Base││  │Enter PTE│ │Upload│Interface│ │ to Oracle    │  │
│          │ │budget│ │line││  └─────────┘ └──────┘        │  │ Assets       │  │
│          │ └──────┘ │budg││  ┌─────────┐ ┌──────────┐    │  └──────────────┘  │
│          │          └────┘│  │ Enter   │ │Distribute│    │                    │
│          │                │  │preapprov│ │ costs    │    │                    │
│          │                │  │expendit.│ └──────────┘    │                    │
└──────────┴───────────────┴──────────────────────────────┴─────────────────────┘
     ▲              ▲                        ▲                         ▲
┌─────────────────────────────────────────────────────────────────────────────┐
│                                 Adjustments                                   │
└─────────────────────────────────────────────────────────────────────────────┘
```

Overview of Oracle Project Costing

Using Oracle Project Costing, you can define projects, work breakdown structures, and budgets; record and report costs against projects; and integrate with other Oracle and non-Oracle applications.

Types of Costs

- You record transactions against a project to record actual work performed or cost incurred.
  - Usage logs
  - Approved supplier invoices

- You also record transactions against a project to record committed costs.
  - Requisitions
  - Purchase orders

Overview of Oracle Projects

Entering Project Expenditures

Labor, expense, and usages

Project cost expenditures

Purchase orders **Supplier invoices**

Personal time and expense

Transaction import from other applications
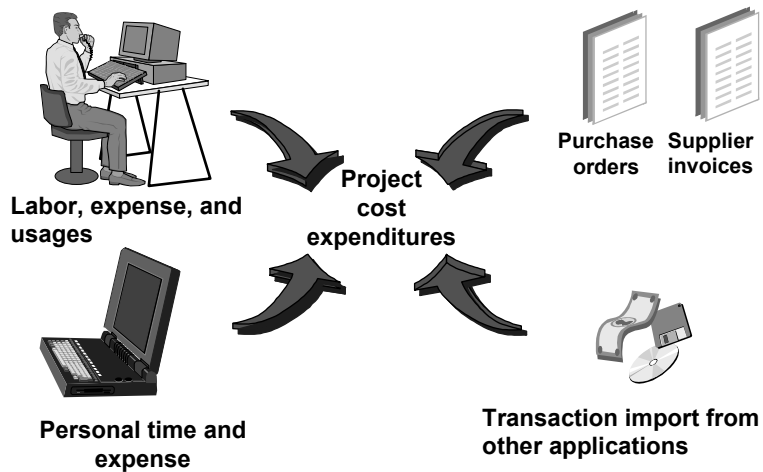
Overview of Project Transactions

You must charge all actual expenditure items and future commitments to a project and task in order to record *actual work performed,* or cost incurred, and *committed* cost you expect to incur.

Methods of Cost Entry

You can track and account for all project costs in you company using the following methods:

- Input charges directly into Oracle Projects batches (usage logs)

- Import the charges using transaction import (usage logs)

- Record supplier transactions for projects in Oracle Purchasing and Oracle Payables (requisitions, purchase orders, and supplier invoices)

Cost Processing

$$\text{Raw Cost Amount} = \left(\text{Raw Cost Rate} \times \begin{array}{l} \text{Quantity} \\ \text{• Hours} \\ \text{• Each} \\ \text{• Miles ...} \end{array} \right) \times \begin{array}{l} \textbf{Burden Multiplier} \\ \text{• Expenditure type} \\ \text{• Burden structure} \\ \text{• Organization burden Rates} \end{array}$$

$$= \boxed{\textbf{Burdened Cost}}$$
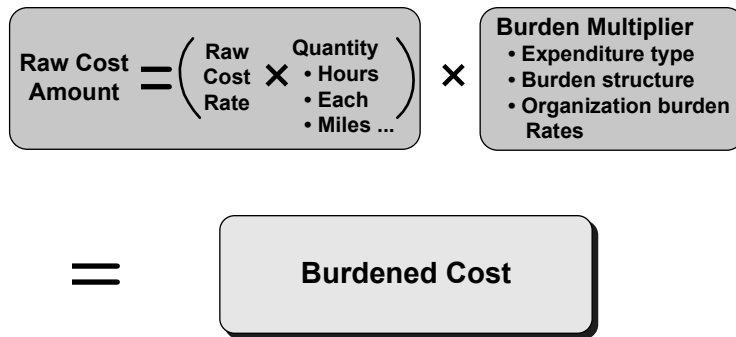
Definition of Cost Processing

Costing is the processing of expenditures to calculate their total cost and to determine the GL accounts to which the costs will be posted.

Distributing Costs

Distributing Costs

After you distribute costs:

- Detail and summary cost amounts can be reported by:
    - Project and task
    - Organization or employee
    - Expenditure type
    - Period
    - Resource list
    - Budget

- Asset lines can be generated for capital projects.

- Cost distribution lines can be interfaced to GL/AP.

Interfacing Costs

After cost distribution, you run the processes required to interface to the other application.

These processes include the following:

- Interfacing costs to AP

- Streamlining the interface process

- Viewing costs throughout the flow

- Interfacing status

- Identifying and diagnosing errors

Cost Calculations

Processed transactions can have two cost amounts:

- Raw cost: The costs that are directly attributable to work performed (also referred to as *direct* cost).

- Burden cost: The cost of running the business that supports the raw cost (also referred to as *indirect* cost).

Total Burdened Cost = Raw Cost + Burden Cost

Burdened Cost

You track burdened cost for two reasons:

- To make project costs visible on a timely basis at predictable rates that can be budgeted and therefore controlled

- So that cost center managers responsible for incurring the overhead costs can be held accountable for variances, rather than placing the responsibility on the project manager who does not control these overhead costs

Function Security

Function Security

Access to Oracle Projects functionality is not restricted by default. You can use function security to control user access to Oracle Projects functions. You can also ask your system administrator to customize your responsibilities.

Using function security rules along with customized responsibilities, you can control what the user can see and do within the entire application.

Example

You may want some users to be able to create and submit an approved cost budget but not to baseline it, so you create a responsibility that allows access to the Enter Budget window and a function security rule that disallows the baseline budget function.

Full Adjustment Capabilities

You can transfer a transaction from one project or task to another.

- A reversing item is created for the old project.

- A new item is created for the new project.

- You can track a transferred transaction to the original source transaction even if it was transferred many times.

The new "transferred" transaction will be:

- Posted to the current open period; may be a prior period adjustment.

- Recosted with the new burdened amount for the destination project or task.

Other Cost Adjustments

You can split a transaction into two transactions and then:

- Adjust the items

- Transfer items to other projects or tasks

You can recalculate cost amounts due to:

- Change in cost or burden rates

- Change in GL account or AutoAccounting

Oracle Projects records the audit trail of all adjustments: who, what, when.

Billing Transaction Adjustments

You can make billing adjustments against transactions.

- Billable or nonbillable reclassification

- Billing hold

- Billing release

- Recalculate cost, revenue, bill amounts:
    - Change cost rate, bill rate, AutoAccounting
    - Change in estimate at completion

You can manage revenue and invoice write-off in Oracle Projects. Once adjustments are complete, regenerate the revenue and/or invoice.

Project and Labor Cost Security

Project and Labor Cost Security

You can provide three levels of project-based security to protect data ownership and sensitivity in relation to a given project or project template:

- The ability of a user to query project information

- The ability of a user to update project information and perform functions on a project

- The ability of a user to view labor costs of detail expenditure items

For each level of security, you can override these default rules or add additional security criteria using a new project security client extension.

How Project Security and Function Security Work Together

- Project security controls what projects you can view and update.

- Function security controls what functions you can perform.

- Together these two types of security allow you to control which functions you can perform on which projects.

Example

You can access the function to generate asset lines in the capital projects workbench, but you can perform this function only on the projects for which you have update access.

Revenue Accrual and Billing

Oracle Project Billing functionality provides the flexibility to keep up with your changing business needs. You can automatically accrue revenue according to your company policies. For example:

- Time and material bill rates

- Cost plus buildup

- Percent spent ratio

- Or any algorithm you define

You can accrue revenue differently based on the type of project. You can also bill each project differently, even if the same client has multiple projects. You can easily manage cash collection in Oracle Receivables.

Billability Controls

You can control which transactions are billable for projects and tasks:

- Billable means that you can accrue revenue and bill your customers.

- Nonbillable means that you cannot accrue revenue and bill your customers.
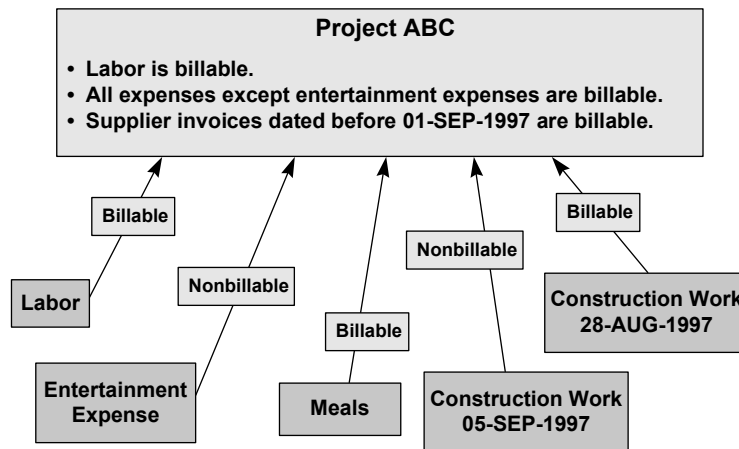
Capitalizing Project Costs
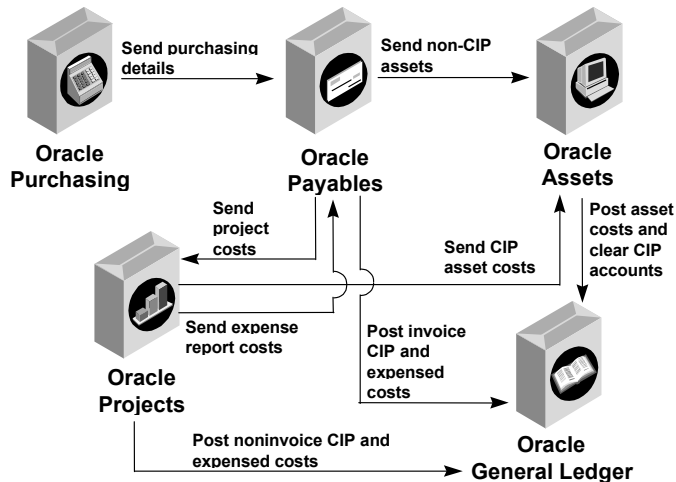
Capitalization of Project Costs

You can easily manage all project related construction-in-process (CIP) costs and expenses for capital projects.

- Work breakdown structures (WBS) provide an efficient mechanism for managing the project and tracking asset costs as they accumulate over time.

- You can associate project assets with a work breakdown structure, collect actual project costs, and then capitalize the assets.

- Oracle Projects becomes the CIP subledger for project-related CIP costs.

- Use the Oracle Projects, generate asset lines functionality to make project information flow directly from Oracle Projects to Oracle Assets, eliminating redundant data entry and ensuring accuracy.

- You can easily adjust asset costs, even after capitalization.

Oracle Projects Interfaces

```
┌──────────────┐      ┌─────────────────────┐   ┌──────────────┐
│   Project    │─────▶│   Oracle Projects   │   │     Cost     │
│  Management  │◀─────│                     │   │  Collection  │
└──────────────┘      │                     │◀──│   Systems    │
                      │                     │   │              │
┌──────────────┐      │                     │   └──────────────┘
│    Human     │─────▶│                     │
│  Resources   │      │                     │
└──────────────┘      └─────────────────────┘
                         │        │      │          │
                         ▼        ▼      ▼          ▼
                  ┌──────────┐ ┌────────┐ ┌──────────────┐
                  │  Status  │ │Customer│ │  Accounting  │
                  │Reporting │ │ Invoice│ │ Transactions │
                  └──────────┘ └────────┘ └──────────────┘
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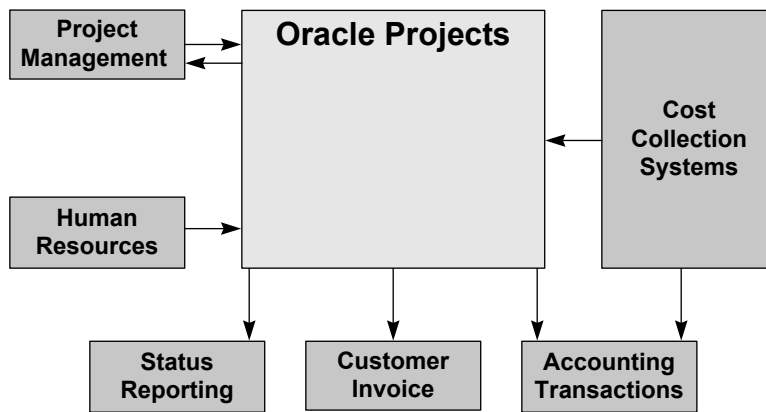
Note

This chart and the next few charts provide a graphical representation of how Oracle Projects is presently integrated with other applications. Additional information is provided as each integration point is discussed.

Oracle Projects Interfaces

Oracle Projects Interfaces

Oracle Projects Interfaces

Oracle Projects

Projects

Project Management

Budgets

Expenditures

Costing

Oracle Human Resources Employees and Organizations

Revenue Accrual

Capitalization

Summarization

Invoicing

Data Warehouse

Project Status Inquiry

Oracle Receivables

Oracle Assets

Oracle General Ledger

PTE

Inventory

External

WIP

Oracle Payables

Oracle Purchasing
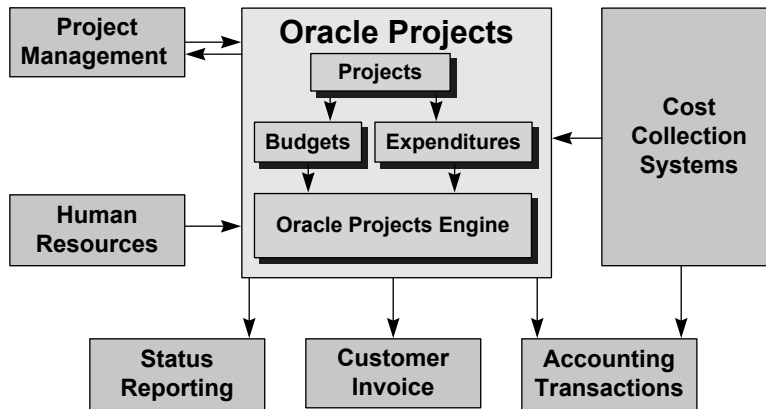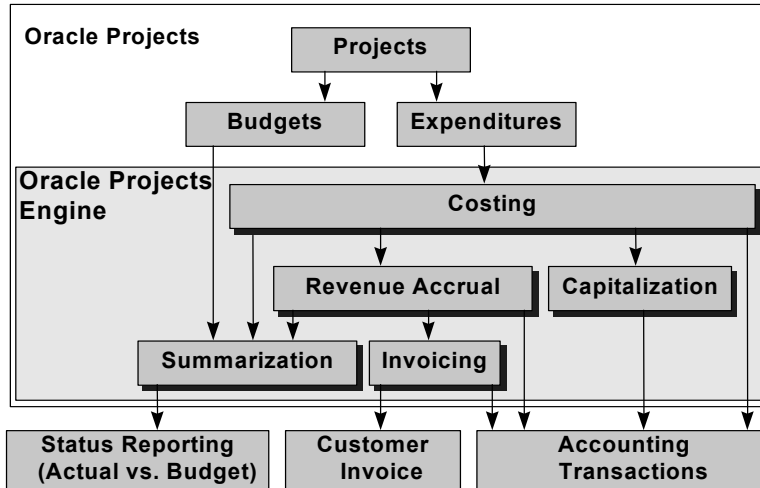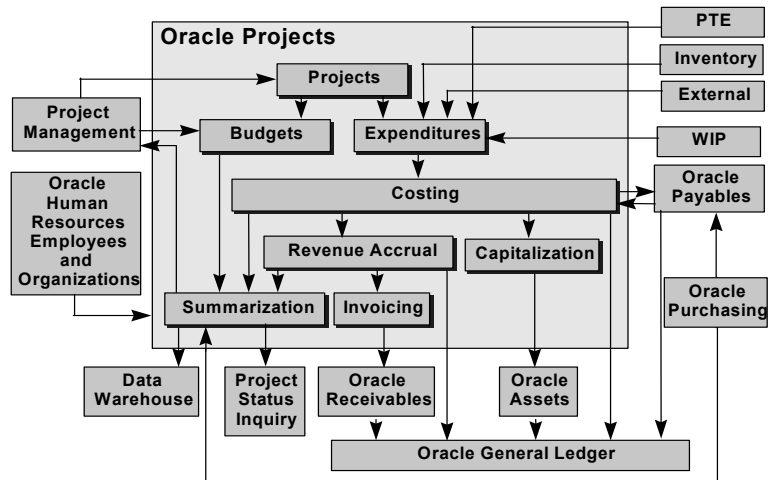
Oracle Projects Interfaces
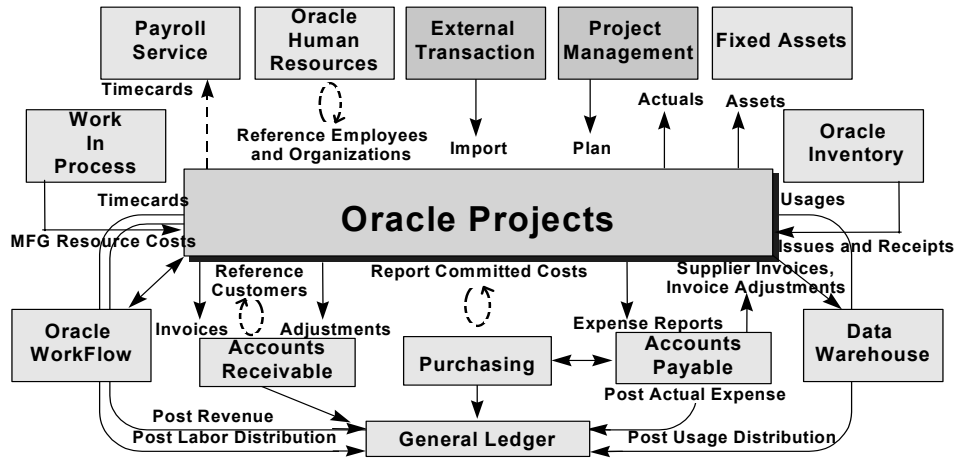
Summary

This lesson described the following:

- Create indirect, capital, and contract projects
  - Concepts
  - Classes
  - Define projects and tasks

- Define project budgets

- Process costs
  - Record and process detail transactions
  - Cost collection and calculation capabilities
  - Type of costs
  - Interfacing

- Capitalize project costs

- Analyze and report project status
  - Compare actions with budgeted amounts and analyze the variances
  - Measure the profitability and performance of the projects

- Display agreements and funding

- Generate revenue and create invoices
  - Simplify customer invoicing
  - Flexible revenue accrual
  - Integrate with Oracle receivables

For more information, see the topics listed in the Online Help Desk.

- Viewing Project Funding

Basic Project Setup

Chapter 2

Basic Project Setup

Section Objectives

At the end of this section, you should be able to describe the concepts behind setting up:

- Project templates

- Budget types

- Resource lists

- Cost Plus processing

- Burden schedules

- Project Status Inquiry

- Project types

- AutoAccounting and Flexbuilder

- Agreement Types

- Bill Rate Schedules

- Invoice Formats

- Credit Types

- Event Types

Project Templates

Use project templates to create new projects quickly and accurately. You can set up any kind of project as a template. All projects originate from a template.

Project Templates	Projects
Bid and Proposal	
Overhead	
Time and Materials	
Product Development	
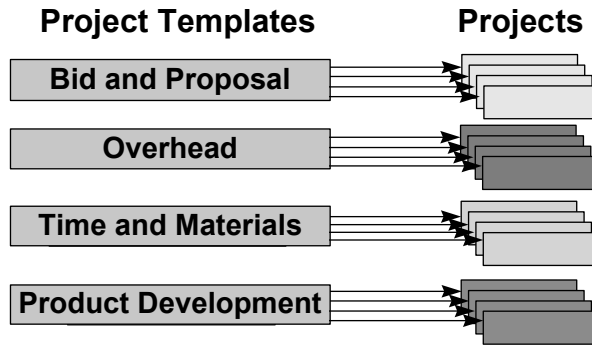
Defining Project Templates

- Each project template predefines the most commonly used options for projects that you typically create.

- Project templates:
    - Enable customized quick project setup
    - Can include customer, classification, WBS, and budgets (everything except transactions and events)
    - Maintain the relationship of a project start date and a task start date when a new project is created
    - Enforce agency policy

Elements of Project Templates

A project template includes the following elements:

- Basic project information

- Work breakdown structure

- Project and task options, including key members, classifications, transaction controls, and any other project and task options

- Budgets

- Quick Entry fields that specify which variable fields to enter for a new project when copying it from a template

- Project option controls that list the project options to display for the project being created

Quick Entry

- Quick Entry simplifies the project setup process with predefined options and values.

- Quick Entry makes the entry of certain options mandatory.

- When you copy a new project from a project template or another project, you use the Project Quick Entry window to enter project information that typically changes between projects.

Quick Entry Fields

You can set up the following Quick Entry fields:

- Project Number

- Project Name

- Project Start Date

- Project Completion Date

- Project Description

- Project Status

- Organization

- Customer Name

Quick Entry

- Key Members (by project role type)

- Project Classifications (by class code)

- Distribution Rules (for contract projects only)

Updating a Project Template

You can update a project template at any time.

- Changes to the Quick Entry fields or project option controls appear in all new and existing projects created from the template.

- Changes to project and task data do not change existing projects created from the template.

To update a project template:

- Find the project template that you want to update by navigating to the Projects, Templates Summary window through N → Setup → Projects → Project, Templates windows.

- Update the definition as necessary.

Disabling a Project Template

- You can disable a project template at any time by changing the template effective dates.
    - You may need to create a new template to replace the disabled templates.
    - You can reinstate the disabled template at any time by changing the effective dates.

- To disable a project template:
    - Find the project template that you want to disable in the Projects, Templates Summary window.
    - Choose Open.
    - Set the end date to the date you require.

Project Template Design Considerations

You must create at least one project template for
every project type that your company uses.

Project Types	Project Templates
Bid and Proposal	XX B&P
Overhead	XX Administrative
	XX Overtime
Time and Materials	XX Time and Materials
Product Development	XX Product Development
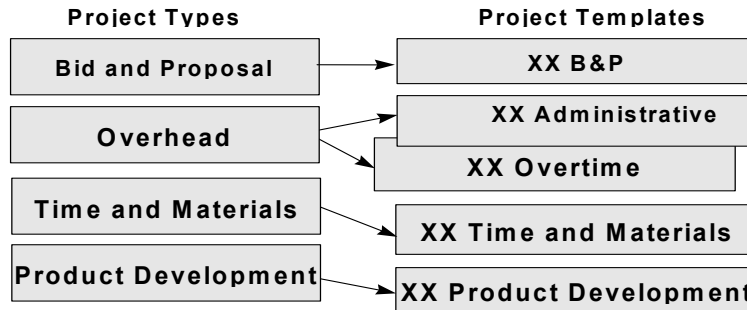
Project Template Design Considerations

- You can set up any kind of project as a template and define different combinations of default project options for each template.

- You can create a template for use across the agency or many templates for each office in your agency.

- To maximize the use of project templates, you should be aware of certain considerations.

Additional Considerations for Project Template Design

- You should choose a numbering or naming convention for your templates that makes it is easy to identify the purpose and definition of each template.

  DELPHI recommends using your OMB ID as the first two positions.

Project Template Design Considerations

- After creating the project from the template, you can change the project type of your project by choosing one of the three predefined project type classes (contract, indirect, capital).

WBS Considerations

You can define typical work breakdown structures to simplify the project setup process.

Consider the task numbering, task names, duration, service types, and managing organizations.

Basic Project Setup
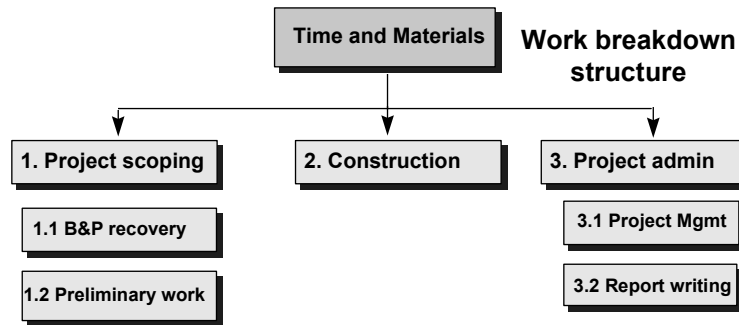
Start and Completion Dates

You define typical work breakdown structures with project and task durations.

- You set up a default start date or a completion date to reflect the typical duration of different kinds of projects and tasks.

- If you create a project template with start and completion dates, Oracle Projects shifts the effective dates of the project-level options by the number of days between the start date of the project and the start date that you enter using Quick Entry.

Note

Oracle Projects supports the dates for the year 2000 and beyond.

- If you do not enter start or completion dates in Quick Entry fields, Oracle Projects creates the new project and its tasks with the same dates as the project template.

Example 1

Project Template		Quick Entry		New Project	
Project Start:	MAY-01	Start Date:	JUN-01	Project Start:	JUN-01
Project Completion:	MAY-31			Project Completion:	JUL-01
Task Start:	MAY-02			Task Start:	JUN-02
Task Completion:	MAY-31			Task Completion:	JUL-01
Key Member Effective:	MAY-01			Key Member Effective:	JUN-01

Start and Completion Dates

Example 2: The new project is shorter (30 days) than the template duration (31 days), but the task duration (30 days) remains the same.

Project Template		Quick Entry		New Project	
Project Start:	MAY-01	Start Date:	JUN-01	Project Start:	JUN-01
Project Completion:	MAY-31	Completion Date:	JUN-30	Project Completion:	JUN-30
Task Start:	MAY-02			Task Start:	JUN-02
Task Completion:	MAY-31			Task Completion:	JUN-30
Key Member Effective:	MAY-01			Key Member Effective:	JUN-01

Example 3: The new project is shorter (15 days) than the template duration (31 days). As a result, the task duration (30 days) is cut short (14 days) to fall within the project dates.

Project Template		Quick Entry		New Project	
Project Start:	MAY-01	Start Date:	JUN-01	Project Start:	JUN-01
Project Completion:	MAY-31	Completion Date:	JUN-15	Project Completion:	JUN-15
Task Start:	MAY-02			Task Start:	JUN-02
Task Completion:	MAY-31			Task Completion:	JUN-15

Task Organization Considerations

If you do not want the task organization to change when you copy the project template, set the project organization to an organization that is not used as a task organization.

Project template   **Work breakdown structure (with task organization)**

- ABC: East
  - 1. Risk
    - 1.1 Risk
    - 1.2 Risk
  - 2. Info services

Quick entry   **Name:** XYZ   **Organization:** Data systems

New project   **Work breakdown structure (with task organization)**

- XYZ: Data systems
  - 1. Risk
    - 1.1 Risk
    - 1.2 Risk
  - 2. Info services
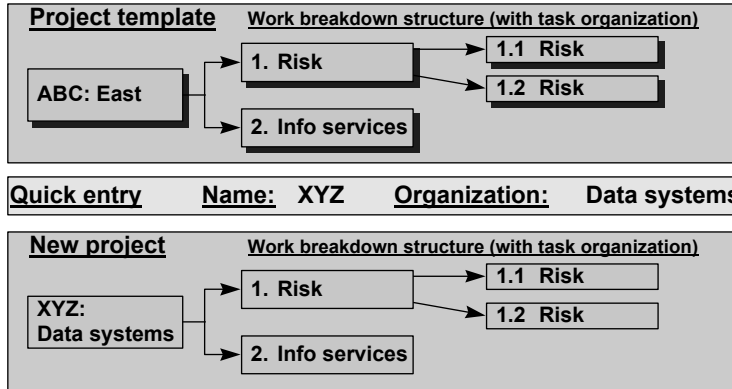
Project Status Controls and Project Verification Rules

Project Status Controls and Project Verification Rules

- You can control actions performed on a project based on the project status.

- When you create a project status, it is associated with a predefined system status:
  - Unapproved
  - Submitted
  - Approved
  - Pending close
  - Closed

- When you define a project type, it has a default starting status so that all projects created from that type will initially have that project status.

- You can combine project status controls with project verification rules.

- When you change from one status to another, a client extension is called to enable customer- specific verification rules.

- You can include your own rules for each status change. For example, you cannot change the status to Closed if any unprocessed items exist for this project.

Business Benefits

You can generate more accurate reporting by restricting the following functions on the projects based on project status:

- Create new transactions

- Adjust transactions

Project Status Controls and Project Verification Rules

- Generate revenue

- Generate invoice

- Capitalize assets

- Include in status reports (project status inquiry)

- Provide user-defined and system-enforced business rules to control project creation and access

Budget Types

Budget Types

- Many agencies need more than one type of budget for reporting purposes. For example:
    - Approved Cost Budget versus Forecast Cost Budget
    - Forecast Revenue Budget for customer reporting requirements
    - Accrued Revenue forecast versus Billed Revenue forecast

- For every project budget entered, you must select a budget type predefined by Oracle Projects or defined during implementation.

Defining Budget Types
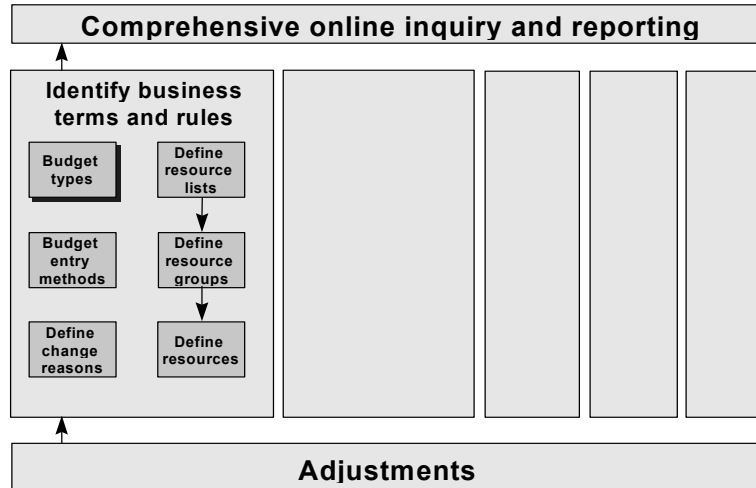
Budget Types Definition

Budget types identify the different kinds of budgets available for project budgeting.

Each budget type is defined as either a cost or revenue budget type.

- Cost budget types can track any of the following:
  - Quantities
  - Raw cost amounts
  - Burdened cost amounts

- Revenue budget types can track the following:
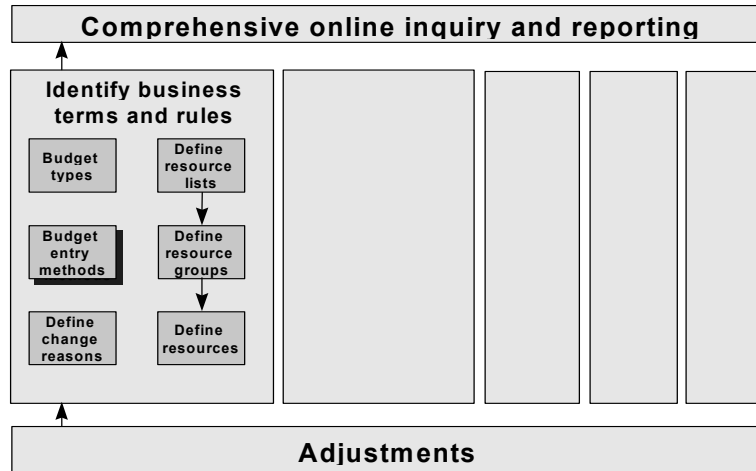 - Quantities
  - Revenue amounts

Defining Budget Entry Methods

The diagram shows "Comprehensive online inquiry and reporting" at the top, with a column labeled "Identify business terms and rules" containing: Budget types, Define resource lists, Budget entry methods, Define resource groups, Define change reasons, Define resources. Additional empty columns appear to the right, and "Adjustments" spans the bottom.

Definition of Budget Entry Methods

Budget entry methods (BEMs) are assigned a username for every combination of budgeting options needed for project budget entry.

BEMs define the following budgeting options:

- Level of budget (project versus task levels)

- Cost data elements (quantity, raw, or burdened cost amounts)

- Revenue data elements (quantity or revenue amounts)

- Time phased (total duration versus time periods)

- Detail of budget (summary versus categorized detail)

Defining Budget Change Reasons
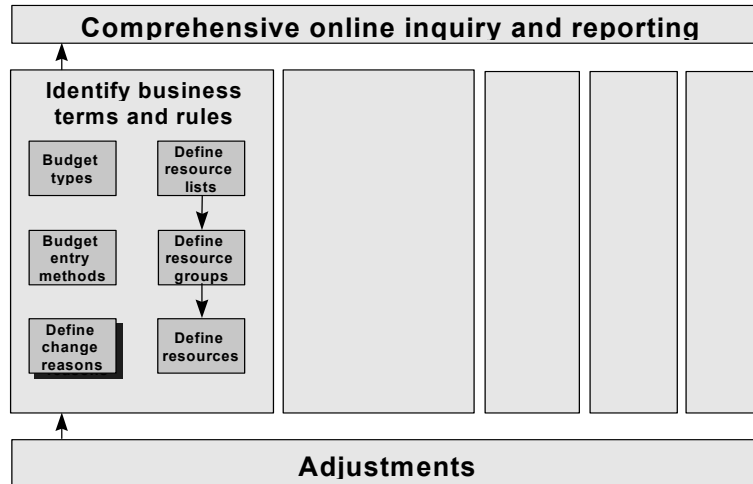
Change Reasons Business Benefits

Budget change reasons can be defined to record why a budget changed.

Change reasons can be used for budget version changes as well as individual budget lines.

Example

- Data entry error

- Estimating error

- Scope change

- Burden multiplier change

Resources

Resources

- Project managers track activities and resources used on a project.
    - Activities are tasks, defined in a work breakdown structure, to track project work.
    - Resources are labor, services, materials, equipment, and other amounts needed to track, complete, and account for project work.

- Oracle Projects uses resources as flexible groupings by which to:
    - Budget
    - Summarize actual costs and commitments

Assigning Resource Lists

```
┌─────────────────────────────────────────────────────────┐
│        Comprehensive online inquiry and reporting         │
└─────────────────────────────────────────────────────────┘
    ↑
┌──────────────┐ ┌──────┐ ┌──────┐ ┌──────┐ ┌──────┐
│ Identify business │ │      │ │      │ │      │ │      │
│  terms and rules │ │      │ │      │ │      │ │      │
│ ┌────────┐ ┌────────┐ │
│ │ Budget │ │ Define │ │
│ │ types  │ │resource│ │
│ │        │ │ lists  │ │
│ └────────┘ └────────┘ │
│             ↓          │
│ ┌────────┐ ┌────────┐ │
│ │ Budget │ │ Define │ │
│ │ entry  │ │resource│ │
│ │methods │ │ groups │ │
│ └────────┘ └────────┘ │
│             ↓          │
│ ┌────────┐ ┌────────┐ │
│ │ Define │ │ Define │ │
│ │ change │ │resources│ │
│ │reasons │ │        │ │
│ └────────┘ └────────┘ │
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┌─────────────────────────────────────────────────────────┐
│                      Adjustments                          │
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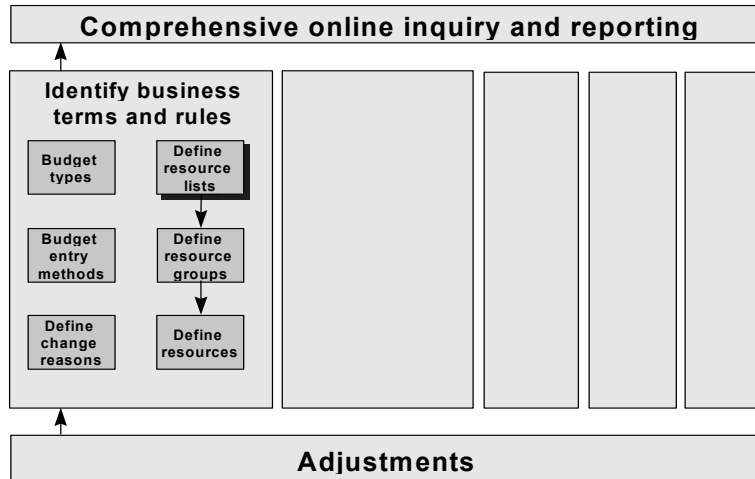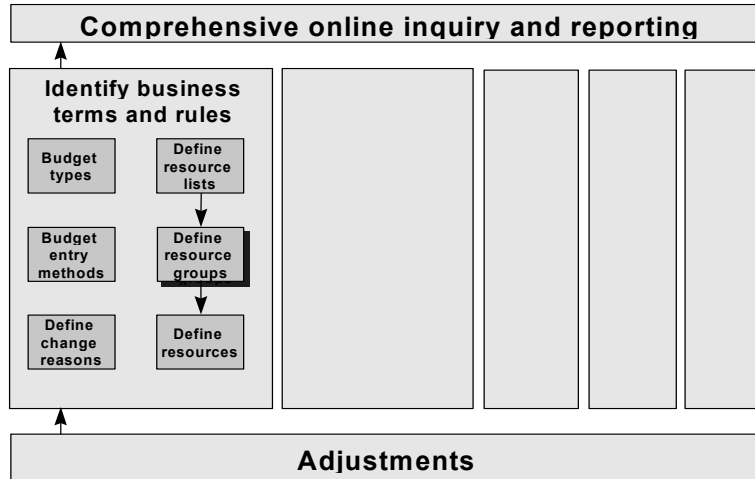
Assigning Resource Lists

- During project setup, resource lists are assigned to a project template or project to indicate which resources are needed for summarizing project actuals for project status tracking.

- Assigning resource lists to templates facilitates cross-project reporting when creating new projects.

- A default resource list is also assigned to each project type to ensure that every project has at least one resource list assigned to it for Project Status Inquiry reporting.

- Additional resource lists can be assigned to projects for further reporting requirements.
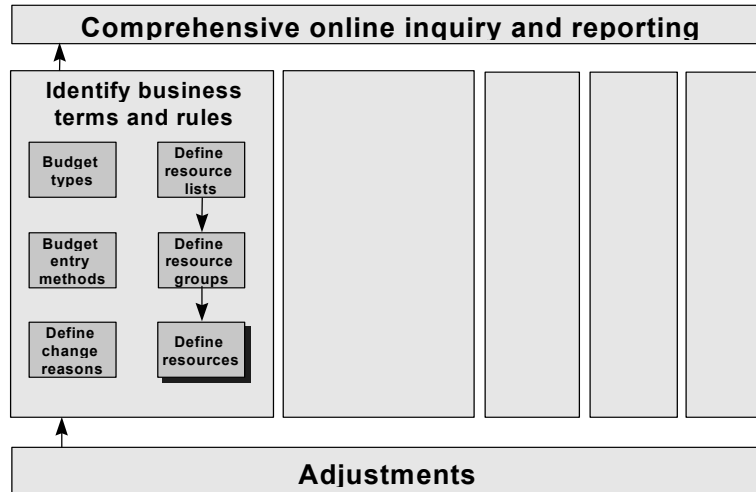
Defining Resource Groups

Resource Group Definition

Resources can be grouped by the following categories or not grouped at all:

- Revenue category

- Expenditure category

- Organization

Defining Resources

Defining Resources

You can assign specific resources to one of the resource groups listed in the Resource Group region (if used).

- Type: Such as employee, job, organization, supplier, expenditure type, event type, expenditure category (if not categorized), revenue category (if not categorized)

- Resource: Resource based on the resource type

- Alias: Unique user-defined name for use in budget entry and viewing project status

- Order: The order of precedence for Project Status Inquiry and select listing

- Enabled: Budget entry and summarization of actuals allowed

Cost Plus Processing

Cost Plus Processing

Cost Plus processing allows you to apply burden costs to raw costs.

- Raw costs are costs that are directly attributable to work performed (also referred to as *direct* costs).

- Burden costs are costs of running the business that support raw costs (also referred to as *indirect* costs).
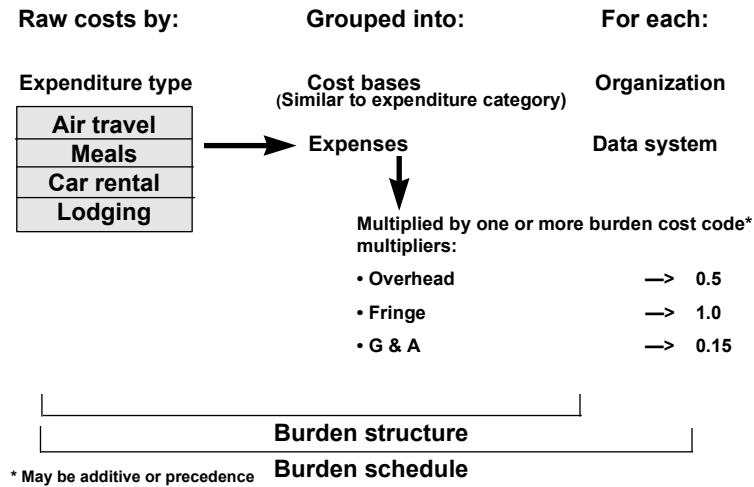
For example, fringe benefits, office space, G&A

- Total Burdened Cost = Raw Cost + Sum of Burden Costs

Simple Example

Direct Labor	(A)	1,000.00	
Fringe @ 30%	(B)	300.00	$.3 \times A$
Total Labor	(C)	1,300.00	$A + B$

Burden Schedules

Raw costs by:	Grouped into:	For each:
Expenditure type	**Cost bases** (Similar to expenditure category)	**Organization**
Air travel		
Meals	→ Expenses	Data system
Car rental		
Lodging		

Multiplied by one or more burden cost code* multipliers:

• Overhead	—>	0.5
• Fringe	—>	1.0
• G & A	—>	0.15

Burden structure
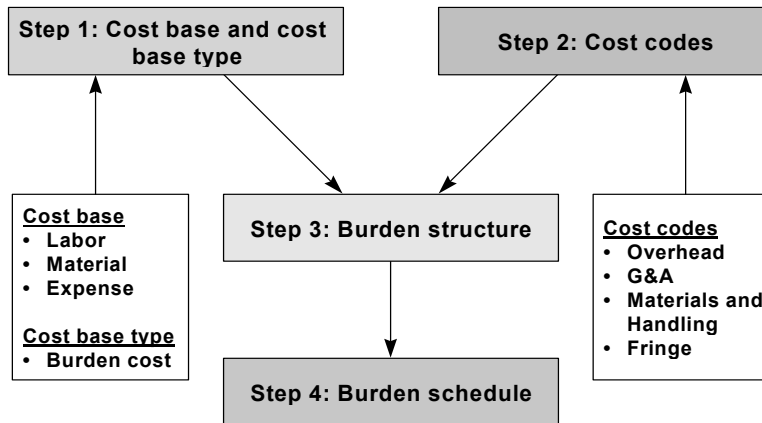
* May be additive or precedence   **Burden schedule**

Burden Schedules

- A burden schedule is an implementation-defined set of burden multipliers that is maintained for use across projects. It is also referred to as a *standard burden schedule.*

- You can define more than one schedule for different purposes, for example:
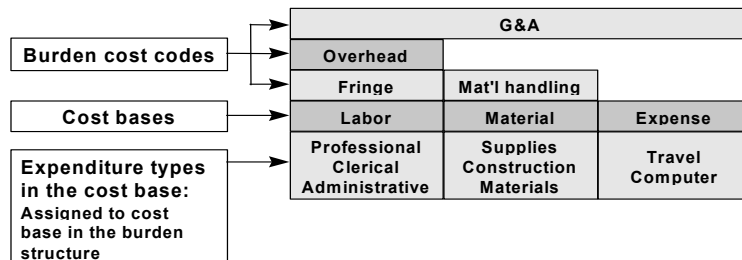   - Costing
    - Revenue accrual
    - Invoicing

Defining Burden Schedules

Step 1: Cost base and cost base type		Step 2: Cost codes

Cost base
- **Labor**
- **Material**
- **Expense**

Cost base type
- **Burden cost**

Step 3: Burden structure

Cost codes
- **Overhead**
- **G&A**
- **Materials and Handling**
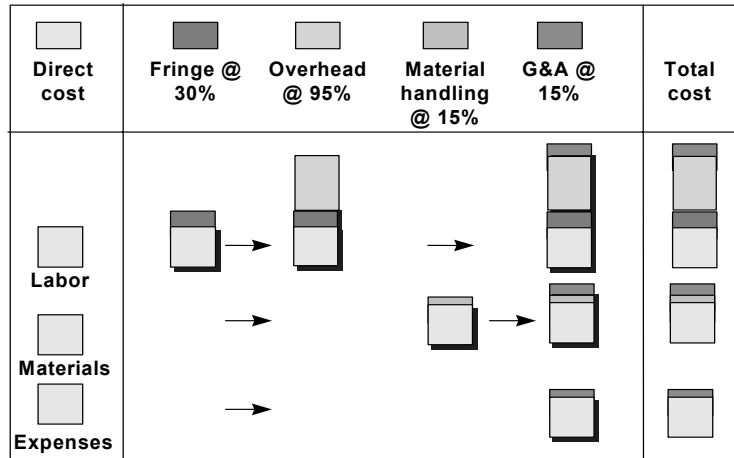- **Fringe**

Step 4: Burden schedule

Burden Structures

You define the expenditure types that make up a cost base and the application of burden cost codes to a cost base in a burden structure.

Burden Structure

Burden cost codes →	G&A	
	Overhead	
	Fringe	Mat'l handling
Cost bases →	Labor	Material	Expense
Expenditure types in the cost base: Assigned to cost base in the burden structure →	Professional Clerical Administrative	Supplies Construction Materials	Travel Computer

Burden Cost Buildup

Direct cost	Fringe @ 30%	Overhead @ 95%	Material handling @ 15%	G&A @ 15%	Total cost
Labor					
Materials					
Expenses					

Basic Project Setup

Assignment of Burden Costs to Cost Bases

Assignment of Burden Costs to Cost Bases

When you specify which burden cost codes to apply to a cost base, you specify the following:

- What burden costs to apply to each cost base

- The precedence of application of multiple burden cost codes

Cost Base	Burden Cost Code	Precedence
Labor	Fringe Overhead G&A	10 20 30
Materials	Materials handling G&A	10 20
Expense	G&A	10

Example

Cost Base	Burden Cost Code	Precedence
Labor	BC1 BC2 BC3 BC4	10 10 10 20
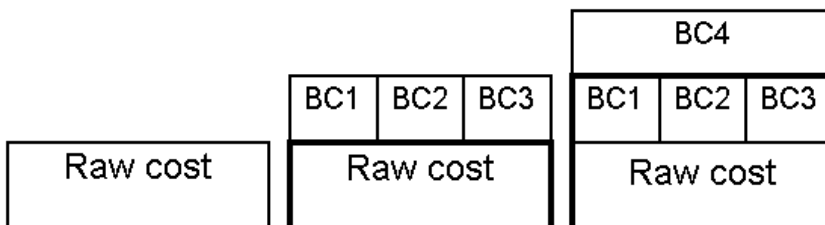
Assignment of Burden Costs to Cost Bases

You can apply several multipliers at the same level.

- You define the precedence to be the same number for these multipliers.

- You can define multipliers at the same level to further break out the burden cost components.

- These multipliers are applied by adding the multipliers together at that level (additive multipliers).

- You can use a mix of buildup and additive multipliers.

Applying Actual Multipliers

To apply actual multipliers:

1. Review the provisional schedule revisions that you want to replace with actual multipliers.

2. Enter the end date for any open provisional revisions if they do not already have an end date.

3. Click the Actual button.

4. Create an actual revision by entering a revision name.

5. Select the provisional revision that you want to replace with the actual revisions.

6. Click OK.

7. Enter the actual burden multipliers in the Multipliers region.

8. Remove holds, save, and compile.

Compiled Multipliers

Compiled Multipliers

- You must compile the multipliers of each schedule revision before Oracle Projects can process transactions using the multipliers.

- Oracle Projects creates compiled multipliers of the entered burden multipliers to calculate the burden costs that are based on a buildup easily and quickly.
  – Compiled multipliers reflect the buildup of multipliers.
  – Without compiled multipliers, you would have to build the multipliers by repeatedly multiplying each multiplier in order.

Example of Compiled Multipliers

Cost Codes	Input Multiplier	Compiled Multiplier
Fringe	.30	.30
Overhead	.95	1.235
G&A	.15	.38025

Algorithm of compiled multipliers:

- Fringe Component = Raw Cost × Fringe Multiplier

- Total Cost After Fringe = Raw Cost + Fringe Component

    = Raw Cost (1 + Fringe Multiplier)

- Overhead Component = Total Cost After Fringe × Overhead

    = Raw Cost (1 + Fringe Multiplier) Overhead

Compiled Multipliers

- Overhead Compiled Multiplier = (1 + Fringe Multiplier) Overhead

- G&A Compiled Multiplier = (1 + Fringe) (1 + Overhead) G&A

Basic Project Setup

Assigning the Burden Schedule
to a Project Type

| Step 1: Cost base and cost base type | Step 2: Cost codes |

| Step 3: Burden structure | Step 6: Define AutoAccounting rules for total burdened costs (optional) |

| Step 4: Burden schedule | **Project type**
To use the burden schedule on a project:
• Assign the burden schedule to the project type.
• Specify which burden schedule will be the default burden schedule.
• Specify whether override is allowed. |

| Step 5: Assign burden schedule to a project type | |

Basic Project Setup

Total Burdened Cost Accounting

- You can optionally post total burdened costs to GL as an asset, which then relieves your expense of raw and burden costs.

- You can create total burdened lines for all transactions on a burdened project even if the transaction is not burdened.

Type	Function	Application	Account	DR	CR
All	Raw Cost	Oracle Projects	Raw Costs Clearing Account	100	100
All	Total Burdened Cost		Total Debit (project inventory) Total Credit (transfer out)	200	200

Note

If you want to post the total burdened costs to GL, you define AutoAccounting rules for two functions:

- Total burdened costs debit

- Total burdened costs credit

Internal Costing Flow

Raw costs

Total burdened costs to GL

Raw costs	Total burdened costs to GL
Distribute costs **Calculate raw and burdened costs: create raw cost distribution lines**	**Distribute total burdened costs** **Create total burdened cost distribution lines**
Interface costs **Interface raw cost distribution lines; accumulate raw and burdened costs**	**Interface total burdened costs** **Interface total burdened cost distribution lines**
Import costs **- Journal import** **- Invoice import**	**Import costs** **Journal import**
Tie back costs	**Tie back total** **Burdened costs**

Maintaining Burden Schedules

If the multipliers for burden schedule revision are incorrect:

- You can correct burden multipliers within a schedule revision.

- You can create a new schedule revision to correct multipliers.

Correcting Burden Multipliers

- Correct the burden schedule of the revision by:
    - Changing multipliers
    - Adding new multipliers
    - Deleting existing multipliers

- Click Compile to compile new multipliers. When you compile, Oracle Projects marks all items that were processed using the burden schedule revision.

- You must reprocess these items by running the appropriate cost, revenue, and invoice process.

Creating a New Revision

You create a new revision if you do not want to apply corrected multipliers retroactively, but you want the new multipliers to affect all expenditure items in the future.

- Create a new revision (or copy it from existing revisions). Based on the start and end dates, the old revision is automatically closed with an end date as the date preceding the new revision start date.

- Enter organizations and multipliers.

- Compile.

Adding a New Organization

If you add a new organization after you have compiled schedule revisions, you must ensure that the new organization is included in the schedules.

- If the organization has its own multipliers, add multipliers to appropriate schedule revisions and recompile.

- If the organization uses parent organization multipliers, run PRC: Add New Organization Burden Compiled Multipliers.

Project Status Inquiry

- In the Project Status Inquiry window, you can control what information you are able to view in the Project Status, Task Status, and Resource Status windows.

- You can display up to 33 columns of information in each status window.
    - Thirty columns show numeric values.
    - Three columns show text.

- PSI column values can be:
    - Values that Oracle Projects maintains, such as various levels of project summary amounts for cost, commitment, revenue, and budget amounts
    - Values that are client-defined calculations for ratios, percentages, and even additional summary amount columns

- All columns display amounts, which are defined in the Project Status Inquiry Columns window or in a client extension stored as a PL/SQL package.

Project Status Inquiry

What information do you need to track project status and, therefore, successfully manage your business?

Project Status window	→	**Project XYZ** Original budget 50000 Total burdened cost 50200 Estimate to completion - 200

Task Status window	→	**Task 1.1** Actual cost 25200 Commitments 0 Total burdened cost 25200	**Task 1.2** Actual cost 20000 Commitments 5000 Total burdened cost 25000

Resource Status window	→	**Task 1.1**
		• Labor
		    Senior consultant 10000
		    Senior engineer 10000
		• In-house recoverables
		    computer services 1300
			• Expenses
			  Entertainment 200
			  Travel 2000
			  Lodging 1000
			  Meals 700

- In the Project Status Inquiry form, you can decide what information to display in the Project Status, Task Status, and Resource Status windows.

- You can display up to 33 columns of information in each status window.
    - Thirty columns show numeric values.
    - Three columns show text.

- Column values can be as follows:
    - Values that Oracle Projects maintains, such as various levels of project summary amounts for cost, commitment, revenue, and budget
    - Values that are client-defined calculations for ratios, percentages, and even additional "summary amount" columns

- In the Setup Project Status Inquiry Columns window, you can choose from the predefined column definitions or modify an existing definition with additional arguments that cause Project Status Inquiry to display your own value.

Default Summary Amounts

Default Summary Amounts

As a default, you can provide the following summary amounts

Actuals	Budgets	Commitments
Burdened Cost, PTD	Current Burden Cost, ITD	Commitment
Burdened Cost, ITD	Current Burdened Cost, Total	Burdened Cost, PTD
Revenue, ITD	Current Burdened Cost, PTD	
Actual Labor Hours, PTD	Original Burdened Cost, Total	
Actual Labor Hours, ITD	Current Revenue, ITD	
	Current Revenue, Total	
	Original Revenue, ITD	
	Original Revenue, Total	
	Current Cost labor Hours, PTD	
	Current Cost Labor Hours, ITD	
	Current Cost Labor Hours, Total	
	Original Cost Labor Hours, Total	

You can use these and other summary amounts when you define the Project Status and Task Status folders

Columns in Resource Folder

The Resource folder contains the same columns, plus the following:

- Current budget cost quantity, Total.

- Actuals quantity, ITD.

Default Column Values

Default Column Values

Column	Description
Project Number	Project Number
Project Name	Project Name
Over Budget	Displays "*" if the ITD total burdened cost is greater than 110 percent of the total current budget burdened cost
Budgeted Margin	Total current budget revenue less total current budget burdened cost
Actual Margin	ITD revenue less ITD burdened cost total cost, ITD burdened cost plus burdened commitments
Estimate to Complete	Total current budget burdened cost less burdened commitments less ITD burdened cost
Financial Percentage Complete	ITD burdened cost divided by total current budget burdened cost
Hours Percentage Complete	ITD labor hours divided by total current budget labor hours
Total Cost	ITD burdened cost plus burdened commitments

Note

Upon installation of Oracle Projects, these nine default column values are provided.

Dynamic Currency Formatting

Oracle Projects includes dynamic currency formatting. In PSI, dynamic currency formatting works in two ways:

- You display currency amounts on the Events, Commitments, and Actuals drilldown windows according to the functional currency format.

- You can mark columns as currency amounts for the Project, Task, and Resource Status windows, according to the functional currency format.

Currency Formatting in Project, Task, and Resource Status Windows

To mark columns as currency amounts:

1. Navigate to the Project Status Inquiry window.

2. Select Project, Task, or Resource in the Folders region.

3. Click the Currency check box for each column definition that you want to mark as a currency amount.

Using Factoring to Control Currency Display

Using Factoring to Control Currency Display

You can use the factoring feature as follows:

- To read very large currency amounts more easily

- To control the multiples factor used to display the amounts

To change the factor in a PSI window:

1. Navigate to the PSI Project, Task, or Resource Status window.

2. From the Special menu, select Factor By.

3. From the Factor By list of values, select a factor (see examples).

Examples of Factors

- Units: Display amounts as calculated

- Tens: Display amounts as multiples of ten (10 = 1.00)

- Ten Thousands: Display amounts as multiples of ten thousands (10,000 = 1.00)

- Millions: Display amounts as multiples of one million (1,000,000 = 1.00)

If you define a column by PSI client extension, you can change the factor of this column using the PA_STATUS.GET_FACTOR function. The PSI client extension calls this new function to enable factoring for the amounts calculated.

Modifying PSI Columns

- If the default columns meet your business needs, you do not need to go any further.

- Otherwise, you can either modify SQL+ expressions in the PSI Columns window or define rules as a client extension to calculate column values using PL/SQL procedures.

- To define a PSI client extension:
    - Design the column definition.
    - Define the column by writing the PL/SQL procedures.
    - Display the column in the Project Status Inquiry window.

Modifying a PSI Column Definition

To modify a PSI column definition using a PSI client extension, you must do one of the following tasks:

- Write the logic in PL/SQL procedure and then store the procedure in the database. For example,
- Actual margin derived column consists of ITD revenue less ITD burdened cost.
- Your agency defines actual margin as ITD revenue less ITD burdened cost less burdened commitments.

- Select the predefined column definition in the PSI Columns window and modify it with SQL expressions.

Note

Even if the value of a column is calculated by a PSI client extension, the column prompt is always defined in the PSI Columns window.

Project Types

Project Types

- Project type is a primary classification for all projects your agency manages.
  - Bid and Proposal
  - Fixed Price
  - Infrastructure

- Project types provide the following:
  - Controls on how Oracle Projects processes the projects
  - Defaults for project setup
  - Reporting and AutoAccounting parameters

- You must set up at least one project type to create projects in Oracle Projects.

In the Project Types window, you specify general information.

- Name: Bid and Proposal, Research and Development, Fixed Price, Infrastructure, and Time and Materials, Cost Plus

- Class: Indirect, capital, contract

- (Task) Service type: Field work, documentation, marketing, research and development

- Description: Useful description to identify or explain the project type

- Effective: The start and end dates of a project type

Defining Project Types

You provide additional information based on the class:

Indirect class
- Costing information
- Budget control

Capital class
- Costing information
- Budget control
- Capitalization information

Contract class
- Costing information
- Default billing information
- Billing assignments
- Distribution rules
- Budget control
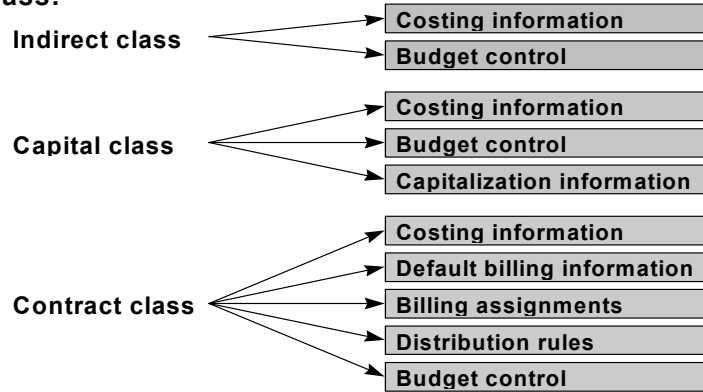
AutoAccounting and Account Generator/Workflow

AutoAccounting and Account Generator/Workflow are used in Oracle Projects to automatically determine the correct General Ledger account information.

This "account coding" is based on the project, task, employee, and expenditure information for a transaction.

Transaction Amy Marlin worked 10 hours of professional labor on Monday, May 13, on project XYZ, task 1.		Company-Cost Center-Account 01-100-5153

AutoAccounting and Account Generator create General Ledger account from transaction information.
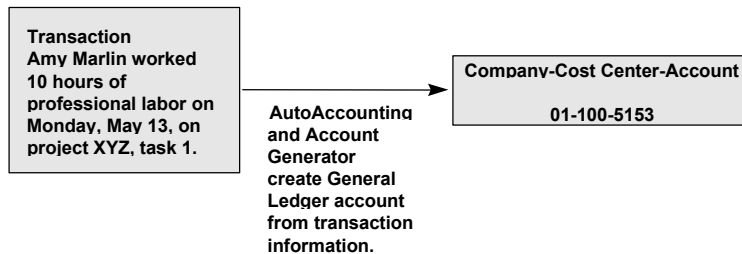
Differences Between AutoAccounting and Account Generator

- **Account Generator uses Oracle Workflow to derive account code combinations. Oracle Payables and Oracle Purchasing use the Account Generator to determine the account code combinations for requisitions, purchase orders, and supplier invoices based on the project information.**
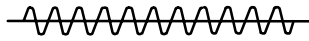
  01-300-4100

- **AutoAccounting determines the account combinations for all other project-related transactions after certain processes are run.**

  **Distribute...
  Generate...
  Interface...
  Tieback...**

  01-300-4100

Basic Project Setup
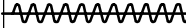
Business Advantages

- AutoAccounting and Account Generator/Workflow share the same business advantage:

Automatic construction of account combinations improves accuracy of data entry because users do not need to determine what account information to enter.

- Account Generator/Workflow business advantages:
  – Automatic construction of account combinations during entry speeds processing time.
  – Each site can customize rules for the construction of account combinations to match the existing way of doing business.

AutoAccounting

How AutoAccounting Works

Based on your accounting practices, DELPHI creates rules in AutoAccounting to specify which general ledger accounts are created. For example:

- Assign revenue from subcontractors to the organization and cost center managing the project.

- For every labor transaction on indirect projects, the employee's organization and cost center should be charged. The natural account should be the indirect labor account based on the labor expenditure type.

- Credit payroll costs to the payroll liability account belonging to the division in which an employee works.

Note

To implement AutoAccounting, DELPHI assigns a set of rules to each type of transaction to use for your agency.

AutoAccounting Rules

- **AutoAccounting rules are formulas (or methods) used to derive each segment within your account structure based on the type of transaction.**
- **Oracle Projects provides three methods:**
  - **Constants**
  - **Parameters**
  - **SQL select statements**
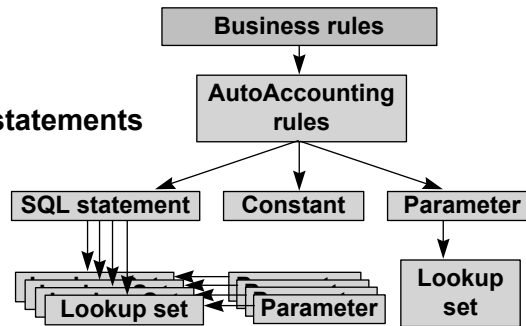
- Each rule can derive the account segment by using one of three intermediate value sources:
  - Constant value: Supply a single valid segment value.
  - Parameter: Context-sensitive intermediate value that requires a lookup set.
  - SQL select statement: Execute an SQL select statement to retrieve a value; make the rule dependent on multiple values and conditional statements.

AutoAccounting Rule Mapping

```
┌──────────┐   ┌───────────┐   ┌───────────────┐
│ Constant │   │ Parameter │   │ SQL statement │
└────┬─────┘   └─────┬─────┘   └───────┬───────┘
     │               │                 │
     └───────────┐   │   ┌─────────────┘
                 ▼   ▼   ▼
          ┌────────────────────┐
          │ Intermediate value │
          └─────────┬──────────┘
                    │            ┌────────────┐
                    │            │ Lookup set │
                    │            └──────┬─────┘
                    ▼                   ▼
          ┌──────────────────────────────┐
          │        Segment value         │
          └───────────────┬──────────────┘
                          ▼
          ┌──────────────────────────────┐
          │   Code combination segment   │
          └──────────────────────────────┘
```
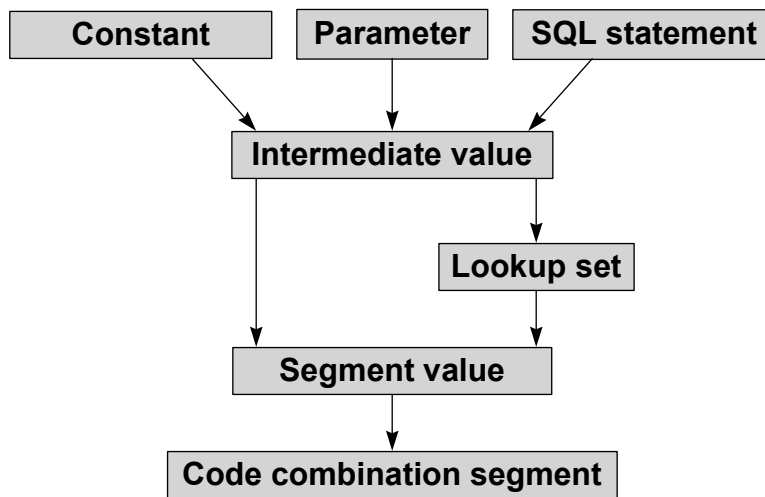
Parameter Value

Parameters are predefined by Oracle Projects.

For example:

- Employee Number

- Expenditure Organization

- Project Type

- Project Organization

If you use parameters, you must create a lookup set that translates the intermediate value into a valid segment value.

Lookup Set

A lookup set is an implementation-defined list of values that correspond to the account segments.

Descriptive Flexfields on Setup Entities

You can use the descriptive flexfield attributes to store values used in AutoAccounting instead of maintaining lookup sets for entities. These entities include:

- Agreement types

- Budget entry methods and budget types

- Class categories and class codes

- Compensation rule sets

Parameter Value

- Event types

- Expenditure categories, expenditure types

- Indirect cost codes

- Lookup sets

- Nonlabor resources or resource organizations, and transaction sources

AutoAccounting Rule Mapping

```
┌──────────┐   ┌───────────┐   ┌───────────────┐
│ Constant │   │ Parameter │   │ SQL statement │
└──────────┘   └───────────┘   └───────────────┘
        │            │                 │
        └──────┐     │     ┌───────────┘
               ▼     ▼     ▼
        ┌────────────────────────┐
        │   Intermediate value   │
        └────────────────────────┘
               │              │
               │              ▼
               │        ┌─────────────┐
               │        │ Lookup set  │
               │        └─────────────┘
               ▼              │
        ┌────────────────────────┐
        │     Segment value      │
        └────────────────────────┘
                     │
                     ▼
        ┌────────────────────────────┐
        │ Code combination segment   │
        └────────────────────────────┘
```
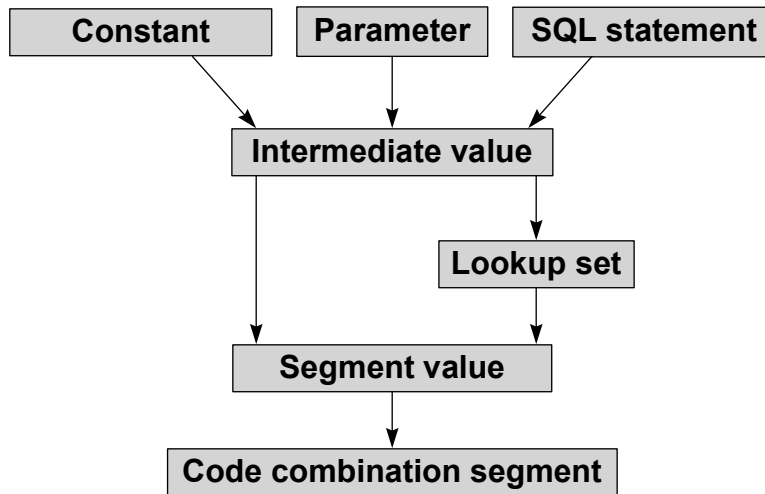
Example of DELPHI Global AutoAccounting Values

AutoAccounting Policy

DELPHI has designed Global AutoAccounting Rules, which a PA DELPHI Controller maintains. AutoAccounting is used when processing accounting transactions that belong to projects. This process determines the DELPHI Accounting Flexfield (AFF) that will be used in processing project related accounting transactions.

If an agency determines that the Global AutoAccounting Rules does not meet their needs, they will send a Kintana Request to the DELPHI team with the agency's requirements and supporting documentation.

Global AutoAccounting Rules Defined

DELPHI has defined several Global AutoAccounting Rules for the DELPHI AFF structure:

FUND/BY/BPAC/ORG/OBJ CLASS/GL ACCT/FUTURE SEGMENTS

FUND Segment Rule: Service Type will be used to derive the Fund segment of the DELPHI AFF structure.

BY (Budget Year) Segment Rule: A SQL statement has been written to derive the BY segment based on the DELPHI global definition for BY. This SQL statement will assign the current fiscal year for No Year Appropriations, and the year established for Annual and Multi-Year Appropriations. The expenditure item date entered will derive the annual and multi-year BY. The FY of this date will be the BY.

BPAC (Budget Program Activity) Segment Rule: The Top Task Value will be used to derive the BPAC segment of the DELPHI AFF structure.

Example of DELPHI Global AutoAccounting Values

ORG (Organization) Segment Rule: ORG segment is derived using a ORG to ORG Lookup Set with either the parameter of Expenditure Organization, HR Organization, or Project Organization.

OBJ (Object) CLASS Segment Rule: Expenditure Types are used with the GLOBAL OBJECT CLASS lookup set to derive the Object Class Segment of the DELPHI AFF structure.

GL ACCT (General Ledger Account) Segment Rule: Class Category and Codes are used to derive the GL Account Segment for most autoaccounting functions. A constant value is used for those functions that require only one constant GL Account segment value.

FUTURE Segment Rule: A Constant of 0000000000 is used for the DELPHI AFF future segments.
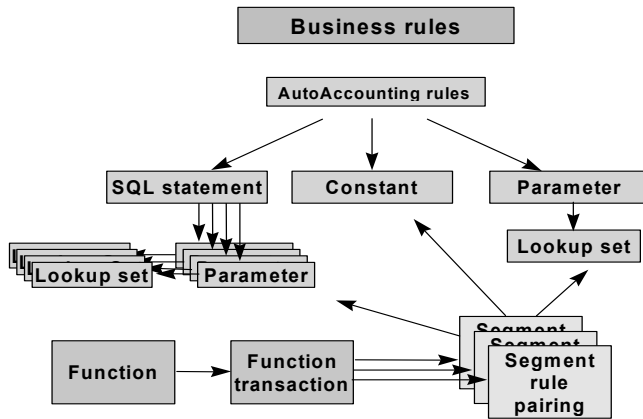
How to Implement AutoAccounting

- Define the business rules.

- For each AutoAccounting function that your agency uses, define rules in the AutoAccounting Rules window.

- For each function, enable the function transaction that your agency uses.

- For each function transaction, assign AutoAccounting rules to all segments within the account structure.

Account Generator/Workflow

Using Account Generator/Workflow

Oracle Purchasing and Oracle Payables use the Account Generator/Workflow to determine the GL account number for each project-related distribution line based on the project information that you enter.

- Oracle Purchasing builds the account number for the charge, accrual, and variance distribution accounts based on the Account Generator/Workflow assignments that you define during implementation.

Business Benefits

DELPHI can define the Account Generator processes so that project-related requisitions and purchase orders use project-related information, and non- project-related documents use the Account Generator/Workflow assignments predefined by Oracle Purchasing.

- Oracle Payables builds the expense account number for project-related invoices using the Account Generator/Workflow assignments given to it during implementation.

- You must enter the account number for non-project-related invoices.

Ability to Override the Account Number

You can control whether users can override the account number determined by the Account Generator for project-related distributions using the profile option PA:Allow override of PA Distributions in AP/PO.

Example

To provide the same ability for the purchasing manager and payables manager to override, set the profile to No at the Site level and to Yes for the managers.

Account Generator Terminology

Account Generator concepts are similar to AutoAccounting concepts and can be mapped as follows:

AutoAccounting maps to...	Account Generator
Function	**Item type**
Assignments	**Assignments**
Constants	**Constants**
Parameters	**Attributes**
Lookup sets	**Value sets**
SQL statements	**Parameters with conditions**
Rules	**Parameters and assignments**

Agreement Types

You set up the agreement types to categorize the various kinds of agreements you negotiate with your clients.

- Hard limit: You can define an agreement type and limit revenue. Any project funded by that agreement type generates invoices until it reaches the revenue limit.

- Soft limit: You can define an agreement type and not limit revenue. Any project funded by that agreement type issues a warning when the revenue limit is exceeded.

Bill Rate Schedules

You can define bill rate schedules to maintain the rates and percentage markups over cost that you charge customers for your labor and nonlabor expenditures.

- You specify one of the following schedule types for each bill rate schedule you define:
  - Employee
  - Job
  - Nonlabor

Invoice Formats

- You create an invoice line using an invoice format.

- You can define different formats for labor, nonlabor, and retention invoice line items.

- You can specify:
    - How to summarize expenditure items
    - Which fields you want an invoice line to display
    - The order in which you want each field to appear

Credit Types

Credit Types

- You can award different kinds of revenue credit to your employees, such as sales credit and market credit.

- After defining the project, you specify the employees as a credit receiver of diversity credit.

Event Types

Event Types

You classify events by event type. When you define an event type, you assign it one of the predefined classifications.

Oracle Projects provides the following classifications:
- Automatic
- Deferred Revenue
- Invoice Reduction
- Manual
- Scheduled Payment
- Write-Off
- Write-On

Assigning Event Types for Cost-to-Cost Revenue

Oracle Projects creates automatic events for the revenue and invoice amounts. To use the Cost-to-Cost Billing Method to assign a default event type you must co-ordinate with the DELPHI team to utilize a predefined billing extension of Cost-to-Cost revenue and Cost-to-Cost invoice.

Summary

This lesson described the general concept of setting up the following:

- Project templates
    - Defining
    - Disabling
    - Updating

- Quick Entry

- Budget types

- Resource lists
    - Assigning
    - Designing

- Cost Plus processing

- Burden schedules
    - Defining
    - Structure
    - Assigning of burden Costs to Cost Bases
    - Applying Actual Multipliers
    - Compiling
    - Implementing

- Project Status Inquiry

- Project types
    - Defining

- AutoAccounting and Flexbuilder

- Agreement Types

- Bill Rate Schedules

- Invoice Formats

Summary

- Credit Types

- Event Types

For more information, see the following topics in the Online Help Desk:

- Defining Quick entry Fields

- Defining Required Project Information

- Defining or Changing Project Statuses

- Updating or Creating Budget Entry Methods

- Project-Level Budget Entry

- Defining Budget Change Reasons

- Updating or Creating Resource Lists

- Defining Cost Bases

- Defining Cost Codes

- Creating New Burden Structures

- Defining Burden Schedules

- Defining Project Status Inquiry Columns

- Setting Up Indirect Project Types

- Setting Up Capital Project Types

- Setting Up Contract Project Types

Summary

- Assigning AutoAccounting Rules

- Defining AutoAccounting Lookup Sets

- Defining AutoAccounting Rules – Parameter/Lookup Set

- Defining AutoAccounting Rules – SQL Stmt/Lookup Set

- Reviewing AutoAccounting Rule Definitions Listing

- Reviewing AutoAccounting Lookup Sets Listing

Contract Projects

Chapter 3

Contract Projects

Section Objectives

At the end of this section, you should be able to:

- Describe all the information and steps required for contract project definition

- Describe revenue accrual and billing methods

- Enter contract projects and additional contract information

- Enter billing overrides for contract projects and tasks

Section 1: Overview of Project Concepts

Project Definitions

```
                          ┌──────────────┐
                          │   Project    │
                          └──────┬───────┘
                 ┌───────────────┴───────────────┐
          ┌──────┴──────┐                  ┌──────┴──────┐
          │   Task 1    │                  │   Task 2    │
          └──────┬──────┘                  └──────┬──────┘
        ┌────────┴────────┐              ┌─────────┴─────────┐
  ┌─────┴─────┐   ┌───────┴────┐   ┌─────┴─────┐     ┌───────┴────┐
  │  Task 1.1 │   │  Task 1.2  │   │  Task 2.1 │     │  Task 2.2  │
  └─────┬─────┘   └────────────┘   └───────────┘     └──────┬─────┘
  ┌─────┴─────┐                                 ┌───────────┴──────────┐
  │ Task 1.1.1│                           ┌─────┴─────┐        ┌────────┴───┐
  └───────────┘                           │ Task 2.2.1│        │ Task 2.2.2 │
                                          └───────────┘        └────────────┘
```

What Is a Project?

A *project* is a primary unit of work that can be broken down into one or more tasks or activities. A project is the unit of work for which you specify revenue and billing methods, invoice formats, a managing organization and project manager, and bill rate schedules. You can charge costs to a project, and you can generate and maintain revenue, invoice, unbilled receivable, and unearned revenue information for a project.

What Is a Work Breakdown Structure (WBS)

A project is organized into smaller, more easily manageable units called *tasks*. Every project has at least one task by default. A *work breakdown structure* (WBS) is a hierarchy of tasks. The WBS can be as simple or as detailed as you want it to be.

Project Classes and Project Types

Project Classes	Project Types
Indirect	**Bid and Proposal**
	Overhead
Capital	**Product Development**
Contract (Project Billing Only)	**Time and Materials**
	Cost Plus

- Project classes are predefined, but project types are implementation-defined

Project Classes

You can use three predefined project classes that track the following types of information:

- Indirect projects
    - Track overhead activities and costs.

- Capital projects
    - Track product/asset development activities and costs, and costs are capitalized as one or more assets.

- Contract (or direct) projects
    - Track activities, cost, revenue, and billing for work performed for and reimbursed by a customer.

Project Classes and Project Types

Project Types

- Is the primary classification for the project.

- Provides controls on how projects are processed.

- Defined during implementation.

- Used for AutoAccounting and reporting.

- Controls processing and defaults for a project.

Project Type Controls Processing and Defaults

Processing

The project type provides control on how costs are processed for a project.

- Whether to burden new costs charged to projects

- Classification of the project whether its an Indirect, Capital, or Contract Project

- Whether to control budgeting options

- Whether to use billing extensions

Defaults

A project type provides control on how defaults are processed for project setup.

- Service type or broad category of work performed ion he task. AutoAccounting uses Service Type to derive the fund value. Therefore, Service Type must equal Fund Value for the global AutoAccounting Ruler.

Project Classes and Project Types

- Revenue accrual and billing methods

- Bill rate schedules

- Burden rate schedules

- Resource lists

- Distribution rule

Note

- AutoAccounting can use project types as parameter.

- Custom reports can be generated by project type.

Contract Projects

A contract project is used to track activities, cost, revenue, and billing for services performed for and reimbursed by a customer.

- Types of contract projects include:
    - Time and Materials
    - Fixed Price
    - Cost Plus

Contract Project Requirements

For contract projects, you define information for revenue accrual and billing based on the requirements of your project, your agency, and your customer.

- Project
    - Work Breakdown Structure (WBS)
    - Charge controls
    - Budget

Project Classes and Project Types

- Agency
  - Project classifications and resource list assignments for analysis and reporting
  - Costing and revenue recognition requirements

- Customer
  - Billing terms
  - Bill rates, burden multipliers, and job billing titles

This information drives the processing of transactions charged to the project.

Section 2: Creating and Configuring Project Templates

The following describes the header fields you enter to create a contract project in the Projects Templates window.

Number

This is a unique identification number used to find and identify the project. The project number method, automatically generated or manually entered, is determined in the Implementation Options at setup. (*Project templates* are always numbered *manually*). DELPHI recommends preceding the unique identification with your OMB ID. This will keep all your templates and projects segregated from other OAs.

> **Note:** A project number cannot be modified after expenditure items, requisitions, purchase orders, or supplier invoices are charged to a project.

Section 2: Creating and Configuring Project Templates

Name

An unique, short, descriptive name to identify the project.

Type

The **Contract** project type tracks activities, cost, revenue, and billing for work performed for and reimbursed by a customer.

Organization

The managing "owning" organization of a project used for reporting and AutoAccounting purposes. You can choose any organization that has the following characteristics:

- The organization belongs to the *project/task organization hierarchy* assigned to the operating unit.

- The organization has the *project/task owning organization classification* enabled.

- The project type class is permitted to use the organization to create projects. This permission is determined when you define the organization.

- The organization is active as of the system date.

Duration

The duration is the start date and completion date of the project. The start date and completion date, or just the end date, can be left blank, but you must enter a start date if you want to enter a completion date.

Section 2: Creating and Configuring Project Templates

Status

The project status indicates the current status of the project. The project status can be used to control what processing is allowed at various stages of a project. For example, you can control whether new transactions can be charged to a project with a certain project status. Every project must have a valid status.

- The following are predefined project statuses:
  - Unapproved
  - Submitted
  - Approved
  - Rejected
  - Pending Close
  - Closed
  - Active

Description

A brief description of the project.

Workflow in Process Checkbox

The Workflow in Process checkbox is enabled based on the project type selected. DELPHI is not using the checkbox. It should remain unchecked.

Public Sector Checkbox

Use the Public Sector checkbox to indicate whether a project is a private or public sector project. Use this for reporting and AutoAccounting purposes. DELPHI is not using this checkbox for autoaccounting.

Project Templates and Quick Entry

- Project template
  - All projects originate from a template.
  - Simplifies the project setup process
  - Copies the project, the WBS, and can be created to copy commonly used project and task options
  - Can create a new project by copying from a project template or an existing project.

- Quick Entry
  - Provides a way to enter variable project information that may change between projects
  - Provides a way to override certain values defined for the project template

Key Members

Key members are employees who can:

- Enter and maintain project data

- View labor cost details charged to the project (based on project role type definition)

Key member information:

- Employee name and number

- Project role type (defined during implementation)

- Each project can have only one project manager at a time.

Examples of Key Members

- Project Manager

- PA Systems Accountant

- PA Accounting Supervisor

Cross-Project Security in Oracle Projects

You can also define responsibilities for cross-project users who are able to enter and maintain project data even if they are not assigned as key members.

Classification Information

Classification Information

- You classify projects based on implementation-defined classification categories and codes.

- You can use these codes as a parameter for AutoAccounting, as well as for reporting and analysis.

Examples of Class Category and Class Codes

Work Breakdown Structure

A work breakdown structure (WBS) is a task tree
showing the organization of project work.

```
                         ┌─────────────┐
                         │   Project   │
                         └──────┬──────┘
              ┌─────────────────┴─────────────────┐
         ┌────┴────┐                          ┌────┴────┐
         │ Task 1  │                          │ Task 2  │
         └────┬────┘                          └────┬────┘
        ┌─────┴─────┐                     ┌─────────┴─────────┐
   ┌────┴───┐  ┌────┴───┐           ┌─────┴────┐        ┌─────┴────┐
   │Task 1.1│  │Task 1.2│           │ Task 2.1 │        │ Task 2.2 │
   └────┬───┘  └────────┘           └──────────┘        └─────┬────┘
   ┌────┴────┐                                           ┌────┴────┐
   │Task 1.1.1│                                          │Task 2.2.1│
   └─────────┘                                           └─────────┘
```

Defining Work Breakdown Structure (WBS)

You can define the WBS to be as simple or as detailed as you choose. You use the WBS to track project progress.

- No limit to number of tasks and levels

- Flexible task numbers and names

- Tasks are processed in the order of their position in the WBS.

- Three distinct positions:
    - **Top Task**: A task whose parent is the project
    - **Mid Task:** A task that is not a top task or a lowest task
    - **Lowest Task** A task that is at the bottom of the WBS, without any child tasks

Work Breakdown Structure

```
                        ┌─────────────┐
                        │  Projects   │
                        └──────┬──────┘
          ┌────────────────────┼────────────────────┐
   ┌──────────────┐    ┌──────────────┐    ┌──────────────┐
   │   Task 1     │    │   Task 2     │    │   Task 3     │
   │   Top and    │    │   Top Task   │    │   Top and    │
   │ Lowest Task  │    │              │    │ Lowest Task  │
   └──────────────┘    └──────┬───────┘    └──────────────┘
          ┌────────────────────┼────────────────────┐
   ┌──────────────┐    ┌──────────────┐    ┌──────────────┐
   │   Task 2.1   │    │   Task 2.2   │    │   Task 2.3   │
   │ Lowest Task  │    │   Mid Task   │    │ Lowest Task  │
   └──────────────┘    └──────┬───────┘    └──────────────┘
                  ┌───────────┴───────────┐
          ┌──────────────┐        ┌──────────────┐
          │  Task 2.2.1  │        │  Task 2.2.2  │
          │ Lowest Task  │        │ Lowest Task  │
          └──────────────┘        └──────────────┘
```

A top task can also be considered a lowest task, if the task does not have any child tasks. Tasks 1 and 3 are lowest tasks as well as top tasks. Tasks 2.1 and 2.3 are lowest tasks although they are on the same level as Task 2.2, which is a mid task. A task that is the child of another task is commonly referred to as a subtask.

Processing by Task Levels

Tasks can be used and processed based on their location in the WBS.

- Top tasks
  - Budgeting
  - Rollup Reporting

- Middle tasks
  - Rollup Reporting

- Lowest tasks
  - Budgeting
  - Transaction Entry
  - Override Entry

Examples of Task Levels:

Basic Task Information

- Information defined for all tasks
  - Number
  - Name
  - Description (optional)
  - Task manager (optional)

- Information defaulted from project or parent task
  - Owning organization
  - Start/completion dates
  - Service type

Task information not at the project level–chargeable checkbox:

- Specifies whether lowest task can be charged

- Defaults to allow charges for lowest tasks; defaults to parent task value for middle tasks

- Automatically unchecks for parent tasks when subtasks are created

Changing Default Task Information

You can override the default task information.

 • **Default information is used for new subtasks.**

 • **Changes do not cascade to existing tasks.**

Example

· **Task 1: No detail change**

· **Task 2: Changed before subtasks created**

· **Task 3: Changed after subtasks created**

```
                    ┌─────────────────┐
                    │    PROJECT      │
                    │ Org = Environ.  │
                    └─────────────────┘
          ┌───────────────┼───────────────┐
    ┌──────────────┐ ┌──────────────┐ ┌──────────────┐
    │   Task 1     │ │   Task 2     │ │   Task 3     │
    │ Org = Environ.│ │ Org = Elect. │ │ Org = Elect. │
    └──────────────┘ └──────────────┘ └──────────────┘
          │          ┌──────┴──────┐         │
    ┌──────────────┐ ┌─────────┐ ┌─────────┐ ┌──────────────┐
    │     1.1      │ │   2.1   │ │   2.2   │ │     3.1      │
    │ Org = Environ.│ │Org = Elec.│ │Org = Elec.│ │ Org = Environ.│
    └──────────────┘ └─────────┘ └─────────┘ └──────────────┘
```

Contract Projects

Task Numbering and Naming

- Tasks are indented to indicate their location in the WBS.

- The Task Number field is used as a sort key within a task level for reporting purposes.
  - Alphanumeric
  - Numbers precede letters

Note

If the WBS has more than 10 tasks, you must always use a leading zero for single-digit numbers. Oracle Projects displays your tasks as follows: 01, 02, 03…, 09, 10, 11.

Examples

Structure

```
          1
         / \
      1.1   1.2
       |
   1.1.1  1.1.2
```

Display:
(sorted numerically)
1—>1.1—>1.1.1—>1.1.2—>1.2

Structure

```
          Project
         /       \
     Phase 1    Phase 2
       |
  Design  Build  Test
```

Display:
(sorted alphanumerically)
Phase 1: Build, Design, Test

Transaction Controls

In the Transaction Controls window, you list controls based on the Limit to Transaction Controls checkbox:

- Checked = Inclusive limit to transaction controls

Allows only charges that are included on the list. Anything not listed is not chargeable.

- Unchecked = Exclusive limit to transaction controls

Specifies charges that are not allowed. Anything listed is chargeable.

You can control exceptions to any rule using the Chargeable checkbox.

Logic of Transaction Controls

- You can enter transaction controls for both project and lowest task.

- Task transaction controls override project transaction controls.

- Priority of processing if there is more than one applicable row:
    - Person-Expenditure category-Expenditure Type (NLR)
    - Person-Expenditure category
    - Person
    - Expenditure category-Expenditure type-(NLR)
    - Expenditure category

Transaction Control Extensions

Transaction Control Extensions

- An extension increases software functionality to implement and automate agency-specific business rules without customizing the software.

- You use transaction control extensions to define cross-project charge control rules that validate agency-specific policies for expenditure entry.

Examples

- You cannot charge new items to a project with a status of *processing only.*

- You can charge only to those tasks managed by your organization.

Burden Multipliers

- A burden multiplier applies to a raw cost amount to reflect the actual cost of doing business. These extra costs include employee benefits, office space, and so on.

- A cost burden schedule is an implementation-defined set of burden multipliers used for costing to derive total cost amounts. You can apply costing burden schedules across projects.

- Burden schedule overrides are revisions to the burden schedule attached to the project. When you define project types at implementation, you decide whether overrides will be allowed for each project type.

Review of Project Definition

Summary of data elements and options available for indirect projects and tasks.

Level at Which Entry is Allowed

Project/Task Options	Project	Top Task	Middle Task	Lowest Task
Classification	X			
Customers and Contacts	X			
Key Members	X			
Organization Override	X			
Resource List Assignments	X			
Transaction Controls	X			X
Burden Multipliers				
Costing Burden Schedule	X Default	X Default	X Default	X Default
Burden Schedule	X			X

Review of the Steps to Create a New Project

1. Create a new project by copying from a project template or an existing project.

2. Enter basic project information. Enter project information that defaults to tasks.

3. Specify project tracking information

4. Key members

5. Classifications

6. Define the WBS: Task Options.

Review of Project Definition

7. Define additional project/task information to manage and process the project:
    –   Transaction controls
    –   Costing overrides
    –   Other

Reports for Project and Task Setup

You can verify project and task setup with these reports:

- Project Configuration Report

Displays project detail information and project overrides.

- Task Details Report

Displays task detail information and task overrides.

- Work Breakdown Structure (WBS) Report

Displays hierarchical format of work breakdown structure.

Section 3: Maintaining Projects and Tasks

Comprehensive online inquiry and reporting

Identify business terms and rules	Define projects	Collect costs
	Enter project	

Maintain Projects and Tasks	Adjustments

Changing the Project Information

You can make two types of changes to project information, unrestricted and conditional, depending on the type of information:

- Unrestricted changes:
  - Name
  - Description
  - Status
  - Public sector
  - Start date: Must be on or before any task start date; will not change existing task attributes

- Completion date: Must be on or after any task completion date; will not change existing task attributes

- Project organization
  - Change is allowed only before transactions are charged to a project.
  - Change is allowed to retain an audit of transactions that are determined from this data using AutoAccounting Rules.

Conditional changes:

- Project number
  - Change is allowed only before transactions are charged to a project. Transactions include timecards, expense reports, usage logs, supplier invoices, purchase orders, requisitions, and events.
  - Change is allowed only if manual project numbering is used.

- Project type: Change is allowed only before transactions are charged to a project.

Changing the Task Information

You can apply the following types of changes to a task definition:

Unrestricted changes:

- Task name

- Description

- Start date: Must be on or after project start date; will not change existing task attributes

- Completion date: Must be on or before project completion date; will not change existing task attributes
  - Task manager
  - Task service type

Conditional changes:

- Task number: Change is allowed only before transactions are charged to a task.

- Task organization: Change is allowed only before transactions are charged to a task. Change is allowed to retain an audit of transactions that are determined from this data using AutoAccounting Rules.

- Chargeable checkbox: Change is allowed only at the lowest task.

Changing the WBS

You can make the following types of changes to the WBS:

- Adding a task: Can add any task without overrides or transactions.

- Deleting a task: Can delete any task without transactions, subtasks, or budget amounts. You will delete overrides when the task is deleted.

- Changing the task level: Cannot be done directly, but it can be done by creating a new desired structure. This may require the transfer of any items that are charged to old tasks.

Changing the Project Statuses

To change the status of a project, choose Change Status. The following rules determine if the status change is allowed:

- The project must have class codes entered for all required class categories.

- If the project is a contract project, the project must have at least one customer, and the total billing contribution must equal 100%.

- Each project customer for the project must have at least one billing contact defined.

- The project must have a project manager assigned to it.

In addition to these rules, Oracle Projects provides a client extension, the Project Verification Extension, that you can use to define additional rules you want to apply for changing the project status of a project.

Section 3: Creating Contract Projects

Creating a New Project from a Project Template or Existing Project

To create a new project:

- Find a template or an existing project that best matches your project needs

- Copy the template or project

- Use Quick Entry to modify information unique to the new project, and then

- Modify or add tasks and any other project options that are required for your project definition.

When you create a project from a template or another project, the project, its work breakdown structure, and the entire project and task options are copied to the new project. The budget amounts from the source template or project are copied to the new project's budget.

If you copy from a template with an agreement, funding, and baselined revenue and cost budget, all are copied to the new project.

If you copy a project from an existing project that has an attachment, the attachment is copied to the new project.

Any transactions charged to the source project are not copied to the new project. These transactions include expenditure items, requisitions, purchase orders, supplier invoices, and billing events (contract projects).

You can only copy from templates, which are effective as of the current date.

Quick Entry

If you create a new project by copying a template or another project, you use Quick Entry to enter project information that commonly changes between projects in a single window. When you use Quick Entry, you override the values you defined for the project template. If you copy from a project that was created from a template, Oracle Projects uses the Quick Entry fields from the source template for your new project.

You can set up the following Quick Entry fields:

- Project Number

- Project Name

- Project Start Date

- Project Completion Date

- Project Description

- Project Status

- Public Sector Indicator

Quick Entry

- Organization

- Customer Name

  Note: You should have a primary bill to and ship to address for a customer to use the customer in Quick Entry. If you enter the name of a customer that does not have an active primary bill-to or ship-to site, then Oracle Projects creates the project without a project customer.

- Key Members (by project role type)

- Project Classifications (by class category)

- Distribution Rule (for contract projects only)

Values you enter in Quick Entry fields override template defaults. Quick Entry fields you leave blank do not override template defaults, except for the following fields:

- Customer Name

- Key Members

- Project Classifications

Agreements

You can enter an agreement representing a purchase order, retainer letter, or any other funding agreement you make with a customer. When you record an agreement, you can specify payment terms for invoices against the agreement, and whether there are limits to the amount of revenue you can accrue and bill against the agreement.

From the Agreements window, you can open the Funding window to allocate funds to one or more projects (or to top tasks within a project), and to see how much unused funding remains for an agreement.

For any agreement, you can review the revenue and billing activity associated with the agreement, such as the amount of revenue accrued, the amount invoiced, and the amount of funding that is allocated and baselined.

Customers and Contacts

- You can assign one or more customers to a project.
    - You use customers, contacts, and addresses defined in Oracle Receivables.
    - You can also assign customers to indirect projects.

- You can specify the customer work site where work is performed for each task.
    - Defaults from the customer work site specified for the project

Project Customer Information

- Customer name/number

- Contribution percentage: Total contribution must equal 100%

- Relationship: Primary, secondary, or nonpaying

- Bill site: Where invoice is to be sent

- Work site: Where work is to be performed

Paying customer contributions reflect the billing percentage throughout the life of the project.

Project Contact Information

- Contact name

- Contact type: Billing, Shipping, Technical

    - A billing contact is required for a contract project.

Overview of Billing Terms

You negotiate the billing terms of the contract with the project customers.

Billing terms for a contract project

- **How should the project be billed?**

Billing method: Milestone, Time and Materials, Cost Plus

- **How often should the project be billed?**

Billing cycle

- **How should the information be displayed on the invoice?**

Invoice formats and invoice comments, job titles

- **Does an amount have to be retained for the project invoices?**

Retention percentage

- **What rates should be used?**

Standard rate schedule, negotiated rates

- **What type of work can be billed? Cannot be billed?**

Billable and non-billable items

Billing Methods and Distribution

- A distribution rule specifies the revenue accrual method and the billing method.

- Notation: <Revenue Accrual Method>/<Invoicing Method>

- Supported revenue accrual and invoicing methods
    - Work: Based on detailed transactions using bill rates and burden rates
    - Event: Milestone billing
    - Cost: Based on percent spent calculation

Billing Cycle

Billing Cycle

You enter billing-cycle information to control how often you create and send invoices to your project customers.

- First bill offset
  - Number of days following the project start date before first invoice cycles off
  - Defaults from implementation options

- Bill cycle days
  - Frequency of billing following previous billing
  - Defaults from implementation options
  - Can create specific project invoices at any time

Invoice Formats and Comment

You enter invoice format information to control how your invoices are created and displayed.

- Invoice formats
  - Formats for creating invoice lines on customer invoice
  - Specify labor and nonlabor formats
  - Defaults from project type

- Invoice comment
  - Can enter text to default to all of the project's invoices
  - Can override for each draft invoice

Invoice Formats Concepts
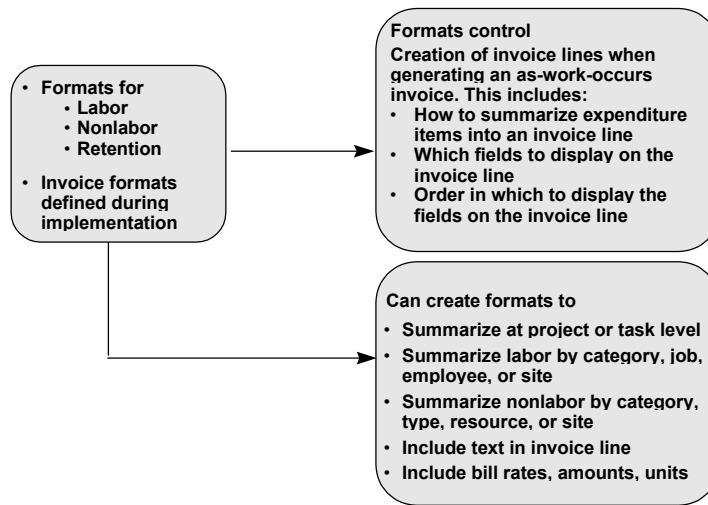
Examples of Invoice Formats

Labor

- Format name: Employee, Job–Hrs @ Rate

- Line format: Employee Last Name, Comma, First Name, Job, Total Hours, "Hours @ $," Bill Rate

- Example line: Gray, Donald Principal Consultant 40 Hours @ $140

Nonlabor

- Format name: Top Task, Exp Type–Total

- Line format: Top Task Name, ":", Expenditure Type, Total Amount, Units

- Example line: Scoping: Computer Services 20 Hours

Invoice Formats Concepts

Retention

- Format name: Retention

- Line format: Retention Amount, "% Retention"

- Example line: 10% Retention

Retention

Retention

- You use invoice retention to reduce a project invoice by a percentage amount that you specify for a particular project.

- Retention invoice format defines what to display in the retention invoice line description.

- Retention % defines the percentage to withhold from each invoice. This percentage is applied to the total invoice amount.

Burden Schedules for Revenue and Invoicing

- You must use the as-work-occurs revenue accrual and/or invoicing method to apply burden schedules to a project. This is the same method used for bill rate schedules.

- In the Standard Billing Schedules window, choose Burden Schedule instead of Bill Rate Schedule.

- You define burden schedules of organization-based multipliers. These schedules are groups of standard multipliers, similar to the concept of standard bill rates schedules.
  - Assign to project or task
  - Can define multiple standard burden schedules for revenue accrual and invoicing

Burden Schedules for Costing, Revenue Accrual, and Invoicing

You can define different burden schedules for the following:

- Costing: Schedules for internal costing are used to track the total burdened cost.

- Revenue accrual: Schedules for revenue accrual may be the same as or different from schedules for invoicing. For example, you may have a more conservative schedule for revenue accrual than for invoicing.

- Invoicing: Schedule for invoicing is negotiated with the client.

Default Revenue and Invoice Schedules

Default Revenue and Invoice Schedules

- You specify the default type of schedule to use for labor and for nonlabor.
  - Bill rate schedule
  - Burden schedule. You can use a burden schedule for labor and a standard bill rate schedule for nonlabor or vice versa.

- You specify the default schedules based on the type of schedule.
  - You can specify different burden schedules for revenue and invoicing.
  - If both labor and nonlabor use a burden schedule, you must use the same burden schedule for both.

Labor Multipliers

- **You can use labor multipliers when you want to apply only one multiplier to raw labor cost for billing purposes.**
- **If you need to apply many multipliers to raw cost for billing, use burden schedules or burden schedule overrides.**
- **Labor multipliers are available at the project level and the lowest task level.**

```
┌──────────────────┐          ┌─────────────────────────────────────┐
│ Project level or │─────────▶│ Labor Multiplier                    │
│ lowest task level│          │                                     │
│                  │          │ Multiplier   Start Date   End Date  │
└──────────────────┘          │    1.5       06-APR-1996            │
                              └─────────────────────────────────────┘
```
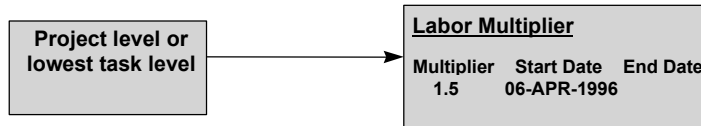
Note

If no override burden schedules exist, you can use the multiplier on top of the standard revenue and invoice burden schedule.

Billing Assignments

In the Billing Assignments window, you can assign a billing extension to your project or top tasks.

Billing extensions calculate revenue and/or bill amounts for transactions using unique methods specific to your business.

Billing extensions are implementation defined.

Examples of Billing Extensions

- Write off excess revenue at the end of the project.

- Accrue revenue amount equal to invoice amount after the invoice is paid.

- Add a 2% communication charge to each invoice based on the labor portion of the invoice.

- Discount 3% of the total invoice amount for volume customers.

- Add $1,000 event billing on each invoice.

- Bill the amount withheld.

Billable Status Control

- You can control which transactions charged to the project are billable and which are nonbillable.
    - Billable items can accrue revenue and can be reimbursed by the client.
    - Nonbillable items do not accrue revenue and are not reimbursed by the client.

- You can control billable items in two ways:
    - Identify tasks that are billable or nonbillable.
    - Use transaction controls to further control billable status by person, category, type, and nonlabor resource.

Note

All expenditure items charged to the task default to the billable indicator based on the task billable status and transaction controls.

You can change the billable status of an item. This topic is explained in *Billing Adjustments LAB0620Z.*

Transaction Controls to Control Billable Status

- **Using transaction controls, you can specify which items are nonbillable.**
- **Otherwise, the billable status of the item is determined from the task billable status.**

--Expenditure	-------------	Non-Labor Resource	Employee	Charge- able	Billable	--Effective------------------- From	To
_____	_____	_____	Marlin	✓	_____	_____	_____
_____	_____	_____	Gary	✓	✓	_____	_____
Expenses	Entertainment	_____	_____	✓	_____	_____	_____

Limit to Transaction Controls

All of Marlin's charges and all entertainment charges are nonbillable. The billable status of Gray's charges are based on the task billable status.

Contract Projects

Data Elements and Options for Contract Projects Definition

Level at which entry is allowed

Project/Task Options	Project	Top Task	Mid Task	Lowest Task
Billing Information (contract projects only)				
Billing setup	X			
Events	X	X		
Billing assignments	X	X		
Credit receivers	X			
Bill rates and overrides(contract projects only)				
Standard Billing Schedules	X (Default)	X (Default)	X (Default)	X (Default)
Employee bill rate overrides	X			X
Job bill rate overrides	X			X
Labor multipliers	X			X
Job assignment overrides	X			X
Job billing title overrides	X			X
Nonlabor bill rate overrides	X			X

Summary of How to Define a Contract Project

1. Copy a project from another project or project template.

2. Define a contract project with basic information.

    Change the default billing information for the contract project.

3. Specify project-tracking information and customer.
    –   Key members (project manager is required)
    –   Customer and contact (required)

Data Elements and Options for Contract Projects Definition

4. Define the Work Breakdown Structure (WBS) (enter project information that defaults to prior tasks).

    Bill the customer in desired units.

5. Define additional project/task information to manage and process the project.
    −   Charge controls (as discussed in *Project Costing*)
    −   Bill rate, burden rate, and overrides
    −   Billable controls and credit receivers

Section 4: Maintaining Contract Projects

Changes to Contract Project Definition

You may need to change project and task information over the life of the contract project as terms and conditions of the project change.

There are two types of project changes that you can make:

- Unrestricted changes

- Conditional changes

Unrestricted Changes to Contract Project Definition

- Bill offset days (only affects 1st Billing Cycle)

- Invoice comment

- Invoice formats

- Retention

- Burden and bill rate schedule information

- Defaults to new tasks; only lowest task schedule is used

- Billing assignments

Conditional Changes to Contract Project Definition

- Project number: Change is allowed only before charging expenditure items to projects, generating revenue and invoices, and baselining a budget for this project.

- Project organization: Change is allowed only before costing, revenue accrual, or invoicing for the project.

- Project type: Change is allowed only before costing, revenue accrual, or invoicing for the project.

Changes to Customer Billing Percentage

The customer billing percentage must reflect the billing percentage throughout the life of the project.

You can change the customer billing percentage only if no invoice exists.

If invoices do exist, you can:

- Delete unreleased invoices

- Cancel released invoices

- Change customer billing percentages, which automatically sets revenue and invoices to be recalculated

- New invoices will be created using the new percentage the next time the invoicing process is run.

Changes to Task Definition

There are two types of task changes you can make:

- Unrestricted changes

- Conditional changes

Unrestricted Changes to Task Definition

- Billable flag

- Standard bill rate schedule and burden schedule information
  - Defaults to new tasks; only the lowest task schedule is used.
  - Does not cascade to existing subtasks.
  - Does not automatically recalculate revenue and invoice amounts.

- Billing assignments

- Customer work site

- Chargeable flag: allowed only at lowest-level task

Conditional Changes to Task Definition

- Task number
  - Change is allowed only before charging expenditure items to the task and/or entering budget amounts on the task and generating revenue and invoice.
  - Change is allowed for tasks without transaction controls or overrides.

- Task organization: Change is allowed only before costing, revenue accrual, or invoicing for the task.

Summary

This lesson has described how to define additional information for contract projects to record the billing terms and conditions:

- Customer information

- Billing terms

- Bill rate schedules and bill rate overrides

- Burden schedules and burden schedule overrides

- Labor multiplier

- Billing assignments/billable controls

- Credit receivers

This lesson also described how to perform these tasks:

- Describe project classes and types

- Create a new indirect project

- Create a WBS

- Enter the appropriate project information

- Apply transaction controls

- Specify a cost burden schedule

- Maintain projects

Project setup drives processing of transactions charged to the project.

Summary

You define a project and a WBS to record work and process transactions as you and your company require.

Project definition can be simple or complex, depending on your requirements.

- Key members

- Classification information

- Work breakdown structure

- Charge controls

- Costing overrides

- Other

For more information, see the following topics in the Online Help Desk:

- Setting Up Contract Project Types

- Creating New Projects

- Entering Agreements

- Entering Funding Lines

- Updating Burden Schedule Overrides in Projects

- Updating Cost Burden Schedules in Projects

- Updating Billing Assignments in Projects

- Updating Project Transaction Controls

Summary

- Updating Labor Multipliers in Projects

- Defining Required Project Information

- Defining Quick Entry Fields

- Changing Status of a Project

- Establishing Key Member Information

- Establishing Template Classification Information

- Establishing Task Information in Templates

- Establishing Template Transaction Controls

- Establishing Template Organization Overrides

- Defining or Changing Project Statuses

Lab 1: Creating a Contract Project

Instructions

In this exercise, you will define a contract project with a reimbursable agreement.

In this exercise you will:

1. Create a contract class project by copying an existing template.

2. Update revenue and billing information.

3. Verify billing schedule data.

4. Update customer and contact information.

5. Create project level transaction controls.

6. Modify a work breakdown structure.

You can create two projects with different revenue accrual and invoicing methods, so that you can compare the results of each for the same transaction.

Lab 1: Creating a Contract Project

Contract Project

You, as a manager of the organization, have just been awarded the San Francisco Contract Project that involves developing a plan. You have assembled a team of professionals from various groups to serve on this project. You will create a project by copying a template with the basic project information. If no template exists with this structure, you will create a new template.

Using the Quick Entry window, you will enter the following information:

- Project Number

- Project Name

- Key member

- Classifications

- Project Start Date

Step 1: Copy a Template to Create a New Project

To create the San Francisco Contract Project, you need to find and copy the T-XXSF1 template. You must enter the following project data to complete the project definitions:

Field Name	Value
Project Number	XXSF1 Contract Project
Project Name	XXSF1 Contract Project
Project Manager	TRNGxx, JOE
Project Start Date	01-JAN-2000
Funding Source	FEDERAL NON DOT

Lab 1: Creating a Contract Project

Step 2: Update Revenue and Billing Information

In the Revenue and Billing Information window, update and verify the following data:

Field Name	Value
Distribution Rule	WORK/WORK
First Bill Offset	15
Bill Cycle Days	1ST OF THE MONTH
Invoice Comment	(Any comment you wish)
Labor Invoice Format	GLOBAL TOP TASK EXP TYPE
Non-Labor Invoice Format	GLOBAL TOP TASK NON-LABOR

Step 3: Verify Billing Schedule Data

Make any necessary modifications in the billing schedules to reflect the following:

Field Name	Value
Labor	**Non-Labor**
BURDEN SCHEDULE	BURDEN SCHEDULE
Revenue Burden Schedule	**Invoice Batch Schedule**
FRA ZERO BURDEN	FRA ZERO BURDEN

Lab 1: Creating a Contract Project

Step 4: Update Customer and Contact Information

The customer for this project is CUS GOV NON DOT. Update and verify the following data:

Name	CUS GOV NON DOT
Number	<Defaults from Name>
Relationship	Primary
Contribution	100
Bill Site	USDA
Bill Address	800 SW D. Street
Work Site	USDA
Work Address	800 SW D. Street

In the Contacts region of the Project Customers window, enter the following:

Contacts	
Type	Billing
Name	Borden, Else
Job Title	<Accept Default>

Step 5: Create Project Level Transaction Controls

It has been agreed with the customer that no CSRS retirement will be billed to them. You want to capture these costs on the project, but you do not want them to be billed to the customer.

Enter the following data in the Transaction Controls window, but leave the *Limit Transaction Controls* checkbox unchecked.

Category	Type	Employee	NonLabor, Resource	Chargeable	Billable
Labor	121K0			Check	No

Lab 1: Creating a Contract Project

Step 6: Modify a Work Breakdown Structure (WBS)

The WBS on your project is copied from the template. You need to modify the WBS with project-specific changes based upon the billing procedures for this project. Enter the following task information:

Top Task Number	Sub-Task	Sub-Task	Sub-Task	Task Name	Description
1660602000				Top Task BPAC	Top Task BPAC
	1660602000.1			Acctg & Tech	Accounting and Technical Service
		1660602000.1.1		Acctg & Adm	Accounting and Administration
		1660602000.1.2		ADP-Sys Analysis	ADP – System Analysis
			1660602000.1.2.1	Sys Design	Sys Design
			1660602000.1.2.2	Sys Opers	Sys Operations

Project Level Override
– Add your name as the PA Accounting Supervisor

Task Level Override
– On Task 1660602000 Enter <Your Name> as Task Manager.

Note: Any override that you enter at the task level supersedes any project-level overrides of the same type.

Procedurally, defining task-level overrides is almost identical to defining project-level overrides.

Lab 1 Solutions: Creating a Contract Project
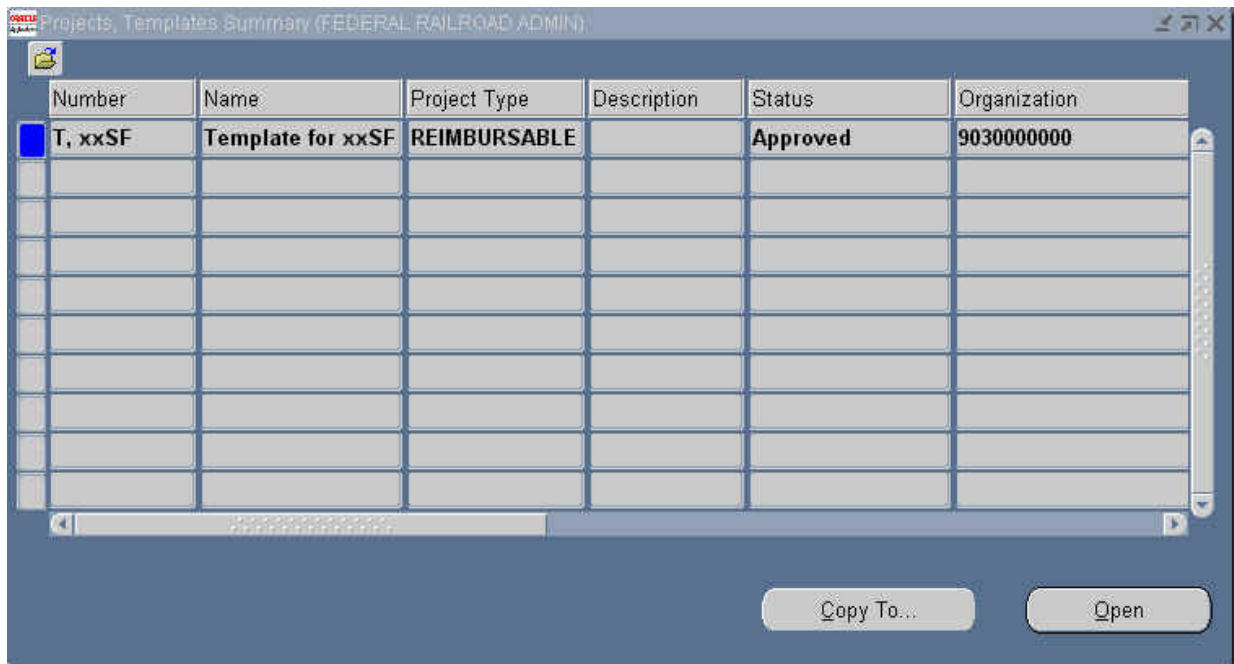
Contract Project

Step 1: Create San Francisco Contract Project, Copy from a Template

1. Navigate to the Find Projects window and enter T, xxSF in the Number field to select this template.

    (N) Projects

    (B) Open

2. Select (B) Find. The Projects, Templates Summary window opens.

Projects, Templates Summary

3. In the Projects, Templates Summary window, select (B) Copy To… to open the Quick Entry window to create a new project. Enter the following information:

Lab 1 Solutions: Creating a Contract Project

Project Quick Entry

4. Select (B) OK. The Projects, Templates Summary window opens.

5. Select your newly created project.

6. Select (B) Open.

Lab 1 Solutions: Creating a Contract Project

Projects, Templates

Step 2: Update Revenue and Billing Information

1. In the Options region of the Projects, Templates window, double-click Billing Information to display the sub-options. (Scroll down to see Billing Information)

2. Select Billing Setup and (B) Detail.

Lab 1 Solutions: Creating a Contract Project

3. In the Revenue and Billing Information window, update or verify the following data:

Revenue and Billing Information

4. Save your work and close the window. Keep the Projects, Templates window open for the next step.

Step 3: Verify Billing Schedule Data

1. In the Options region of the Projects, Templates window, double-click Bill Rates and Overrides to view the sub-options. You may need to scroll down to see Bill Rates and Overrides.

2. Select Standard Billing Schedules and (B) Detail.

3. In the Billing Schedules window, update or verify the following information:

Lab 1 Solutions: Creating a Contract Project

Billing Schedules

4. Save your work and close the window. Stay in the Options region of the Projects, Templates window.

Step 4: Update Customer and Contact Information

1. In the Options region of the Projects, Templates window, choose Customers and Contacts, and (B) Detail. The Project Customers window opens.

   You may need to scroll up to see Customers and Contracts.

Lab 1 Solutions: Creating a Contract Project

2.   Update or verify the following information.

Project Customers

3.   Enter your contact name and type in the Contacts region. Select (B) OK.

Step 5: Create Project Level Transaction Controls

1.   In the Options region of the Projects, Templates window, select Transaction Controls and (B) Detail.

2.   Since CSRS Retirement is not billable on the this project, you must enter a transaction control to reflect this rule. Update or verify the following information.

Lab 1 Solutions: Creating a Contract Project

Transaction Controls

3. Save you work and close the Transaction Controls window. Remain in the Projects, Templates window.

Step 6: Modify Work Breakdown Structure

Project Level Override

1. In the Options region of the Projects Templates window, select Key Members and (B) Detail.

Lab 1 Solutions: Creating a Contract Project

Key Members

2. Enter your name as the Employee Name.

3. Enter PA Accounting Supervisor as your Role.

Task Level Override

1. In the Options region of the Projects, Templates window, select Tasks and (B) Detail. The Find Tasks window opens. Select (B) Find to Query all tasks. Select ++… to open all tasks. Verify the following information.

Lab 1 Solutions: Creating a Contract Project

2. With your cursor on task 1660602000.1, select (B) Options.

3. Choose the blue box to the left of Task Detail to navigate to the Task Details window.
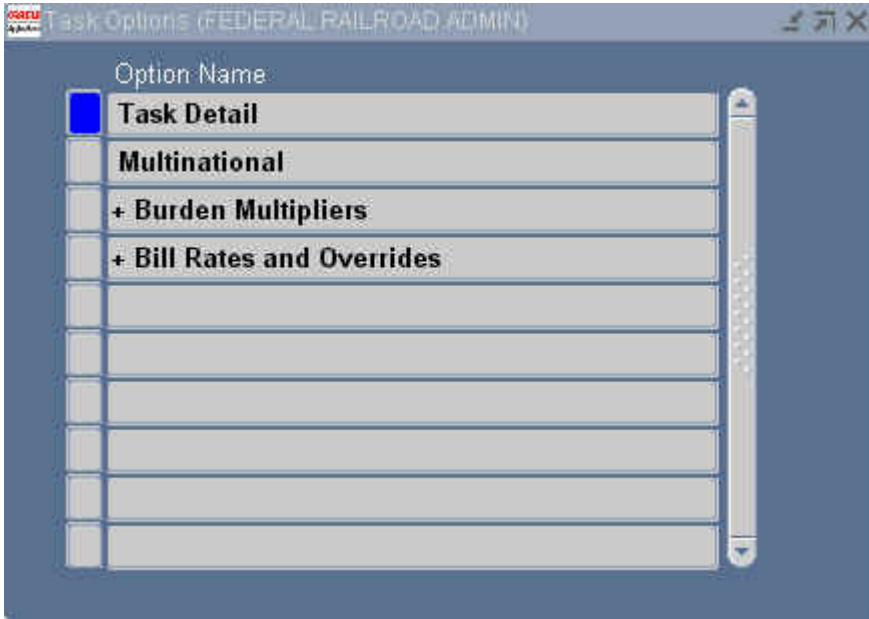
Task Options

4. Enter <Your Name> as the Task Manager.

Lab 1 Solutions: Creating a Contract Project

Task Details

5. Save your work.

6. Close the Task Details and Tasks options windows by choosing M: File, Close Form.

Capital Projects

Chapter 4

Capital Projects

Section Objectives

At the end of this section, you should be able to:

- Create a capital project

- Define a capital project asset

- Generate and interface asset lines

- Adjust capital project costs

Section 1: Overview of Capital Projects

Comprehensive online inquiry and reporting

Identify business terms and rules	Define projects	Collect costs	Place asset in service

- Enter Reqs/POs in PO
- Define assets
- Enter project
- Enter budget
- Baseline budget
- Enter supplier invoices
- Interface Import to G/L
- External transactions
- Transaction import
- Enter PTE
- Upload
- Enter preapproved expenditures
- Interface Distribute costs
- Generate asset lines
- Review & adjust asset lines
- Interface to Oracle Assets

Adjustments

Purpose of Capital Projects

- Use capital projects to collect construction-in-process (CIP) and expensed costs for assets you are "building" using internal resources.

- These internal resources can include the following:
  - Labor
  - Equipment
  - Inventory

Construction-in-Process (CIP)

Construction-in-Process (CIP)

- General accounting rules require that CIP costs should not be expensed to the income statement until the asset is placed into service. Then the asset cost is incrementally depreciated over the life of the asset.

- CIP costs are generally treated as an asset on the balance sheet and not recorded directly as an expense on an income statement.

- CIP costs are reclassified as fixed assets when the asset is completed and placed in service.

Types of Capital Projects

Types of capital projects can include the following:

- Construction projects

- Major equipment installations or modifications

- Research and development (R&D) on an existing product

Examples

- A building owner has a major leasehold improvement project to upgrade an existing building.

- The CIP costs of an R&D project to improve an existing product can be capitalized and would in turn be amortized over the life cycle of the product.

Accounting Flow

Accounts

	Projects Subledger	General Ledger	Fixed Assets Subledger

Balance Sheet

Projects Subledger: **CIP** (Eligible for capitalization)

General Ledger — **Balance Sheet**

Assets
- Billed A/R   X
- Unbilled A/R   X
- Fixed assets   X
- CIP   X

     Total Assets XX

Liabilities   X

Equity   X

     Total L&E   XX

Fixed Assets Subledger: **Capitalized asset amount**

Income Statement

Projects Subledger: **Expenses** (Not eligible for capitalization)

General Ledger — **Income Statement**

Revenue   XX

Expenses
- Contract costs   X
- Overhead   X
- G&A   X

     Total Expenses   XX
     Net Profit/Loss XX

Fixed Assets Subledger: **Depreciation amount**

Legend
- Periodic — — —▶
- Event driven ———▶

Capital Projects

Oracle Systems Integration

Oracle Assets maintains all the subledger information for fixed assets within Oracle Financial Applications. Oracle Assets can accept:

- supplier invoices from Oracle Payables for capitalization into fixed assets.

- completed CIP asset costs from Oracle Projects.

Integration with Oracle Assets

Oracle Assets uses a process called Mass Additions to import assets from both Oracle applications and external applications.

- Once an asset is recorded, Oracle Assets handles all depreciation expense generation, adjustments, and retirements.

- Oracle Projects and Oracle Assets handle all the account coding for General Ledger for CIP and asset capitalization.

Capitalizing Project Costs

Oracle Purchasing — Send purchasing details → **Oracle Payables** — Send non-CIP assets → **Oracle Assets**

Send project costs

Send expense report costs

Send CIP asset costs

Post asset costs and clear CIP accounts

Oracle Projects

Post invoice CIP and expensed costs → **Oracle General Ledger**

Post non-invoice CIP and expensed costs
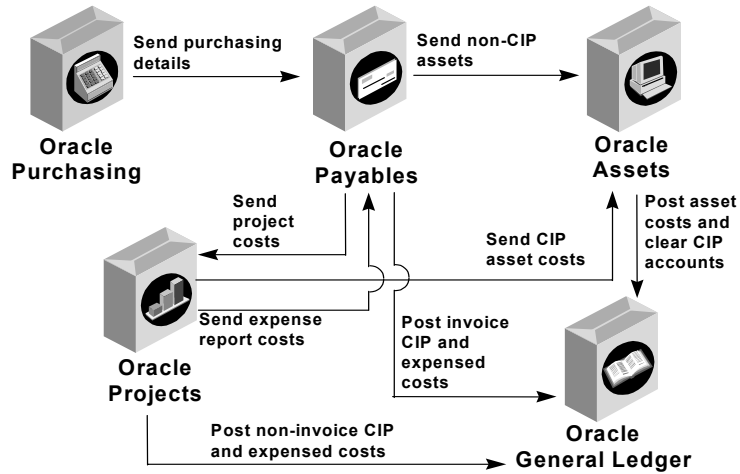
Capital Projects

Functional Overview of Capital Projects

You can use Oracle Projects to collect all costs associated with a capital project.

- Costs are characterized as either *eligible* (CIP) or *not eligible* (expensed) for capitalization within a given capital project.

- CIP costs are associated with the assets the project is "building."

- When the assets are ready to be placed in service, the CIP costs are summarized and interfaced into Oracle Assets to become depreciable fixed assets.

- Capital project costs can be adjusted within Oracle Projects before and after asset costs are interfaced to Oracle Assets.

Section 2: Creating a Capital Project
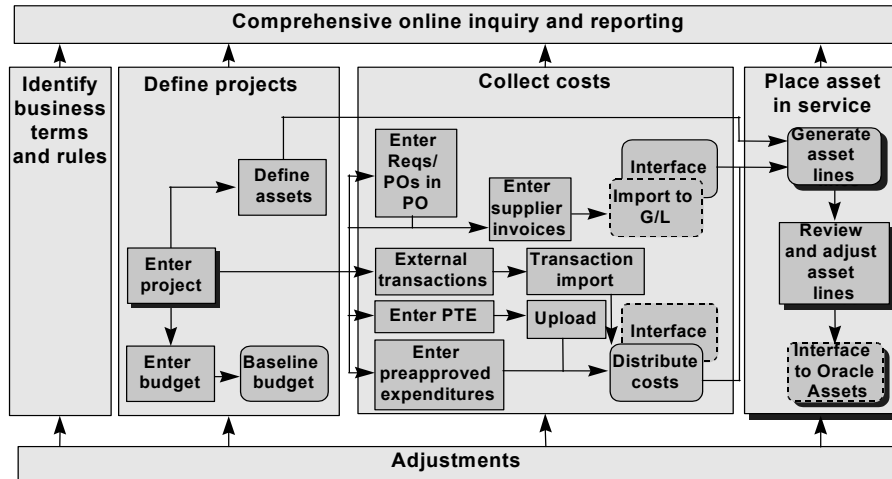
Creating a Capital Project

- Choose or create a project template with the appropriate capital project type.

- Create capital project for each asset or group of assets that needs to be constructed.

- Project setup defines:
    - Which costs are capitalized
    - How costs are summarized for import to Oracle Assets by expenditure groupings and WBS groupings
    - Which costs are assigned to which project assets

Capitalization Controls

Capitalization Controls

Project-level and task-level transaction controls can be used to indicate which kinds of expenditures are allowable for capitalization.

Control Levels	Control Windows
Entire task	Task Details window
Specific employee	Transaction Controls window
Specific expenditure category	Transaction Controls window
Specific expenditure type	Transaction Controls window
Specific nonlabor resource	Transaction Controls window
Specific expenditure item	Expenditure Inquiry window

CIP Cost Summarization

CIP costs are summarized into one or more assets before being sent to Oracle Assets. Summarization methods are based on the following project setup details:

- Capital project type

Project types must be assigned during the initial project setup procedures and cannot be changed after processing has begun on a project.

- Assignment of assets to the WBS level(s):
  - Can be done any time during or after initial project setup
  - Must be completed before placing the asset in service

Capital Project Types

The capital project type is used to define the following attributes for that project:

- Capitalization of raw versus burdened costs

Sends raw or burdened costs to Oracle Assets

- CIP (expenditure) grouping method

Defines the expenditure summarization method

- Asset definition requirement
  - If enabled, this requirement specifies that assets must be completely predefined in Oracle Projects before interfacing with Oracle Assets is allowed.
  - If not enabled, asset definition can be completed in Oracle Projects or Oracle Assets.

CIP Grouping Methods

- Capital project types can use only one CIP grouping method per project type.

- CIP (expenditure) grouping methods:
    - All expenditures or uncategorized (highest level of summarization)
    - Expenditure category
    - Expenditure category, nonlabor resource
    - Expenditure type
    - Expenditure type, nonlabor resource

Grouping Levels and Level Types

Grouping Levels

- In addition to CIP expenditure grouping methods, capital projects use *grouping levels* to summarize asset costs.
  - Project level
  - Top task level
  - Lowest task level
  - Mixed task level

- Summary levels cannot be assigned at different levels within a given "branch" of a WBS. For example, if a top task level is used, subsequent lower tasks of that top task cannot be summarized separately.

Grouping Level Types

Grouping levels are established by opening an Asset Assignments window from either the project window or the appropriate top task or lowest task level. Grouping levels can be one of the following two types:

- Specific assets

- One or more assets can be assigned.

- Common costs:
  - Cannot be directly assigned to assets
  - Used to group together common tasks for allocation to multiple assets

Section 3: Defining Assets
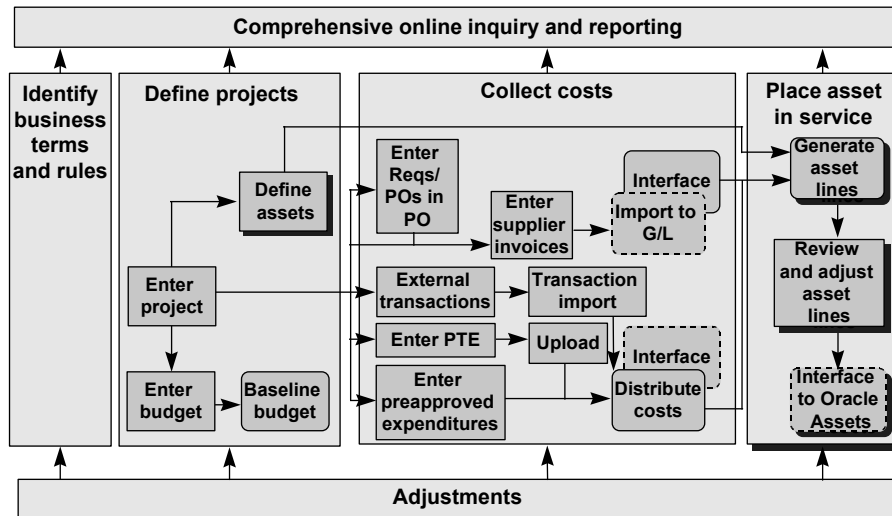
- CIP assets must be predefined within Oracle Projects before they are interfaced to Oracle Assets. You can define assets during project setup or modified (and assets added) during the building of the asset(s).

- If a capital project type uses the Complete Asset Definition attribute, you need to supply all the asset definition information before the asset is interfaced to Oracle Assets.

- Otherwise, you can complete asset definition during the Mass Additions process of Oracle Assets.

- Asset definition does not need to be done until the asset is ready to be placed into service.

Defining Multiple Assets
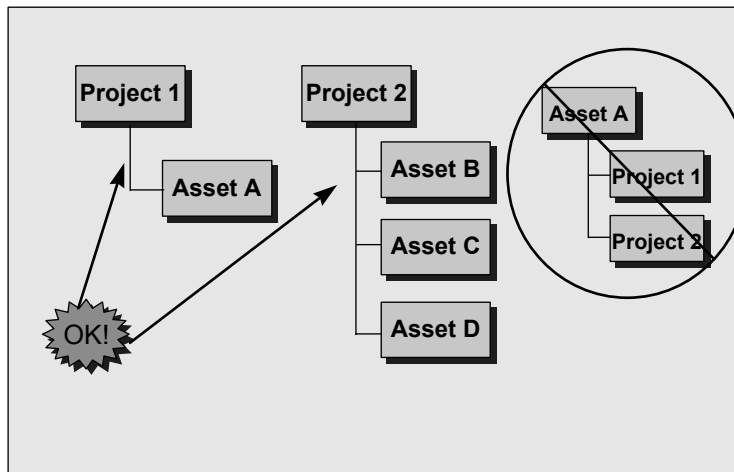
Defining Multiple Assets

You can create multiple assets for one project. However, assets cannot be created for multiple projects.

If you are entering one asset at a time, use the Project Options-Assets window.

Use the Capital Projects-Assets window to review, modify, and enter new assets for a given project.

Section 4: Placing a CIP Asset in Service
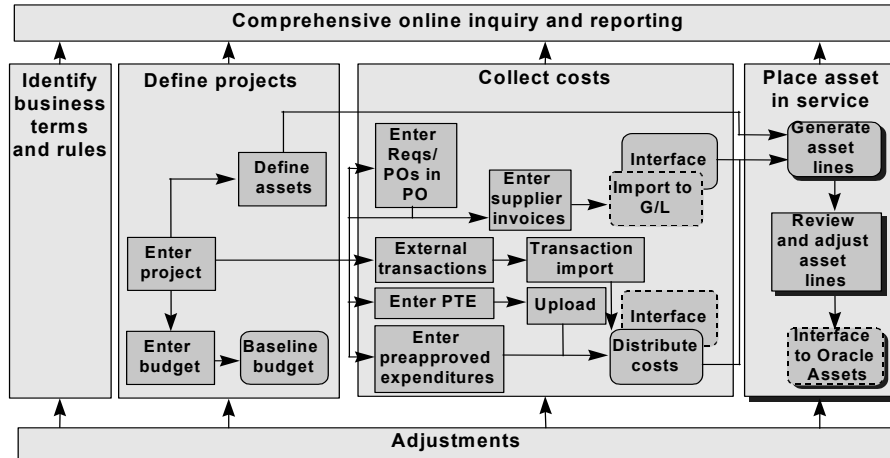
- Placing a CIP asset in service involves the following steps:
  - Finish building the project asset.
  - Record the actual placed-in-service date.
  - Complete the asset definition (if required).
  - Generate asset lines.
  - Review/adjust/assign asset lines (as needed).
  - Interface assets to Oracle Assets.

- Once project assets are interfaced, the assets are imported into Oracle Assets using the Mass Additions process.

Complete Asset Information

For assets that are assigned to project types with the Complete Asset Definition attribute enabled, Oracle Projects prompts you to enter missing required fields when attempting to save the actual date in service entry.

Caution

Assets *not* requiring complete asset definition in Oracle Projects can be finished during the Oracle Assets Mass Additions process.

Additional Fields for Asset Lines

The Additional Line Information region includes details related to the specific asset line highlighted in the Asset Lines window.

Filed Name	Note
Original Amount	Original amount of the generated asset line before any splitting
Split Percentage	Percentage of original amount for the specific asset line
CIP Account	CIP account code
Status	Interface status of the asset line
Rejection Reason	Reason for rejection of an asset line by interfacing to Oracle Assets

Matching Strategy for Asset Lines

The following logic is used to determine how asset lines are matched to CIP assets:

- If only one asset is on a given grouping level, all asset lines created are automatically assigned to that asset.

- If multiple assets are assigned to a grouping level, all asset lines are created as unassigned.

- If the grouping level type is Common Costs, all asset lines are created as unassigned.

Capital Projects

Mapping Costs to Assets

Mapping Costs to Assets

- Number of assets assigned to a grouping level
    - One asset is assigned to a grouping level.
    - More than one asset is assigned to a grouping level; one or more assets are placed in service.

- Expected results after running Generate Asset Lines process
    - All detail costs charged to that level are automatically mapped to that asset.
    - Asset lines are created for all capitalizable costs, but no assets are assigned to the lines.

Additional Asset-Mapping Characteristics for PO-Matched Supplier Invoice Costs

- More than one asset is assigned to a grouping level, and the cost distribution is for purchased goods from a purchase order that has an inventory item with a default asset category. Detail is mapped to the single asset that matches the default asset category for that grouping level.

- More than one asset has the same asset category as the default asset category for a purchased item. An asset line is created and an asset category is assigned, but the asset line is not assigned to an asset automatically.

Reviewing and Assigning Asset Lines

After asset lines are created, make the following adjustments in the Asset Lines window:

- Mandatory

Assign assets to all unassigned asset lines (select an asset name in the Asset Name field).

- Optional
    - Split an asset line into multiple lines and assign the line to different assets (choose the Split Line button).
    - Change the asset assigned to a line.
    - Change the line description.

Interfacing Asset Lines

For Oracle Projects to send an asset line to Oracle Assets, the following conditions must be met:

- The actual date in service must be in the current or a prior Oracle Assets accounting period.

- Expenditure items related to the summarized lines must be interfaced with Oracle General Ledger.

- Expenditure items for supplier invoice adjustments must be interfaced with Oracle Payables.

- An asset name must be assigned to the asset line.

Running the Interface Assets Process

- You can send assets lines to Oracle Assets to become fixed assets by running the Interface Assets process.

- For either a single project or a range of projects, select the PRC: Interface Assets process in the Submit Requests window.

- Review the mass addition lines in the Oracle Assets Prepare Mass Additions window.

How to Run the Interface Assets Process

1. Enter the project or range of projects.

2. Enter the In Service Date up to which you want to process capitalized costs.

3. Select (B) Submit to run the Interface Assets process.

4. Review the mass addition lines in the Oracle Assets Prepare Mass Additions window.

Section 5: Adjusting Asset Lines

Adjustments

- You can make the following adjustments to expenditure items on capital projects:

- Change from capitalizable to noncapitalizable.

- Change from noncapitalizable to capitalizable.

- Recalculate raw and burden costs.

- Add or change expenditure item comment.

- Split item into two expenditure items.

- Transfer item to another project or task.

Postcapitalization Adjustments

Postcapitalization Adjustments

- Once expenditure items are sent to Oracle Assets, you can adjust the items as well as collect new items for capitalization.

- Adjustments and additions can be either positive or negative.

- The expenditure items for the adjustments and new changes are grouped into new asset lines when the Generate Asset Lines process is run for the project.

- These new asset lines are added to the original asset in Oracle Assets as a cost adjustment.

Caution

Cost adjustments cannot be sent to Oracle Assets until the original mass addition line is posted by Oracle Assets using the Post Mass Additions process.

Reversing Capitalization

Reversing Capitalization

If an asset was placed in service in error and interfaced to Oracle Assets, capitalization can be reversed in Oracle Projects and the reversing lines sent to Oracle Assets.

To reverse capitalization:

- Ensure that the Amortize Adjustment check box is disabled for the affected asset.

- In the Capital Projects - Assets window, select (B) Reverse and save.

    To unreverse, select (B) Reverse again and the check box will toggle back.

Caution

- If the original asset is reversed in Oracle Assets, you cannot record the transaction in Oracle Projects. Always perform the correction in the source system (Oracle Projects).

- Reversing lines cannot be sent to Oracle Assets until the original asset is posted in Oracle Assets using the Post Mass Additions process.

Reversing Capitalization

- Save and run the Generate Asset Lines process to remove the actual date in service from the asset.

- Create reversing lines.

- Interface reversals to Oracle Assets.

Recapitalizing Reversed Assets

To recapitalize reversed project assets, follow the procedures for generating asset lines.

You cannot change project and task grouping levels once asset lines are sent to Oracle Assets.

Abandoning a CIP Asset

Capital projects can be abandoned at any time.

- Before capitalization:
  - Change all project expenditures from capitalizable to noncapitalizable in the Expenditure Items window.
  - Disable the Capitalizable check box at the task level in the Task Details window to prevent the creation of new CIP expenditures.

- After capitalization:
  - Reverse the capitalization of all the assets in the Assets window.
  - Run the Generate Asset Lines process.
  - Change all project expenditures from capitalizable to noncapitalizable in the Expenditure Items window.
  - Disable the Capitalizable check box at the task level in the Task Details window to prevent the creation of new CIP expenditures.

Section 6: Accounting for CIP and Capitalized Asset Costs

Accounting for CIP Costs

- Oracle Projects uses AutoAccounting to post capital project costs to CIP and expense accounts in the General Ledger. Oracle Payables uses Account Generator for supplier invoice costs.

- When tracking CIP projects, Oracle Projects acts as a subsidiary ledger for CIP assets, and Oracle Assets acts as a subsidiary ledger for capitalized (depreciable) assets only.

- Oracle Assets uses Account Generator to post to the appropriate CIP and fixed-asset accounts in Oracle General Ledger when project assets are capitalized.

Accounting Example

In the following example, Project X is set up to collect costs to build a new clean room. The following costs are recorded to the project.

Description		Amounts
Supplier invoice for architectural drawings	$2,000.00	
Supplier invoice for building contractor	$5,500.00	
Supplier invoice for building permit penalty	$200.00	$7,700.00
Employee labor for project management		$1,400.00
Employee expense report for miscellaneous costs		$250.00
Use of company car		$55.00
Total Cost		$9,405.00

Supplier Invoice Transactions

- Supplier invoice transactions from Oracle Payables are posted to General Ledger before they are sent to Oracle Projects. Account Generator determines the accounts for the following journal entry.

- Example:

Dr CIP-Clean Room   7,700.00

Cr Accounts Payable Trade   7,700.00

Oracle Projects Expenditure Items

Capitalizable employee labor, expense report, and usage expenditures for your capital projects are posted directly to the CIP account.

Example

Dr	CIP-Clean Room	1,705.00
Cr	Payroll Liability	1,400.00
Cr	Expense Report Liability	250.00
Cr	Usage Clearing	55.00

Capitalizable Adjustment

Capitalizable Adjustment

- Adjustments to costs reverse any previous amounts posted to General Ledger.

- Example:

(Part of original supplier invoice was not capitalizable.)

Dr Supplier Invoice Expense   200.00

Cr CIP-Clean Room   200.00

Accounting for Asset Costs

Accounting for Asset Costs

- Each asset line created has an associated General Ledger CIP account. After interfacing the asset lines to Oracle Assets, you can run the Create Journal Entries process to transfer costs from the CIP account (associated with the asset lines) to the asset cost account (determined by the asset category assigned to the asset).

- Example:

Dr Clean Room - Asset Cost   9,205.00

Cr CIP - Clean Room   9,205.00

Summary

This lesson described how to perform these tasks:

- Create capital projects

- Define assets

- Place CIP asset in service

- Adjust asset lines

- Provide accounting for CIP and capitalized asset costs

For more information, see the following topics in the Online Help Desk.

- Entering Asset Detail in Templates

- Entering Specific Asset Type in a Project

- Entering Common Cost Asset Info in Projects

- Entering Specific Asset Types in a Template

- Reviewing Total Costs of a Capital Project

- Entering Capitalization Details

Lab 1: Creating a Capital Project

Instructions

Capital projects are used to collect construction in process (CIP) and expensed costs for assets you are creating/building. In this exercise, you will set up a capital project, define assets, enter a usage log (to create transactions which we will later capitalize), generate asset lines and finally review asset lines.

Step 1: Create a Capital Project

Creating a capital project is similar to creating an indirect project. You copy from a project template with a project class of capital. Since you have already practiced setting up a new project from a template, for this exercise you will simply copy from a capital project that already exists.

Use the following data to create a capital project:

Project Number	xxlab (xx is your student number)
Project Number	xx New Laboratory Project (xx is your student number)
Project Name	xx New Laboratory Project (xx is your student number)
Project Description	Build new Lab
Organization	7000000000
Project Manager	<your user name>

Step 2: Define Assets for Capital Projects

In this exercise, you define the following asset:

- Lab Building

Lab 1: Creating a Capital Project

Asset Name	Lab Building
Asset Number	<Blank>
Description	Lab Building
Asset Category	FRA.17306000.32010
Book	FRA
Location	<Blank>
Units	1
Employee Name	<Blank>
Employee Number	<Blank>
Depreciate	Check
Amortize Adjustments	Not-Checked
Depreciation Account	27ASSET000.2000.000000 0000.0000000000.00000.67 106600.0000000000.00000 00000.0000000000.000000 0000

Lab 1: Creating a Capital Project

Step 3: Setup Project Level Transaction Controls

Use this data to practice for setting up project level transaction controls:

Expenditure Category	Category Type	NL Res.	Employee	Chargeable	Capitalizable
Interest/ Dividends	43110	Blank	Blank	Checked	No

Step 4: Assign Assets to the Tasks

You will assign the following asset to task 0160060000.2:

- Lab Building

Step 5: Enter Usages Against Your Capital Project

Use the following information to define expenditures and expenditure items for your project:

Batch Name	xx-Cap-U8 (xx is your student number)
Ending Date	Today's date (defaults to week ending date)
Class	Miscellaneous
Control Total	Blank
Control Count	Blank

Employee Name	Employee Number	Org.	Expenditure Date	Control Total	Control Count
Userxx	<Defaults>	<Defaults>	<Defaults>	<Blank>	<Blank>

Lab 1: Creating a Capital Project

Date	Project No.	Task No.	Exp. Type	Organization	Qty	Descriptive Flexfield: Supplier Type
<Defaults>	xx New Lab Project	016006 0000.1	31780	7000000000	1500	Employee
<Defaults>	xx New Lab Project	016006 0000.2	31780	7000000000	2500	Employee

Step 6: Place Assets in Service

To place assets in service, you enter today's date in the Actual field.

Step 7: Generate Asset Lines

Specify the In Service Date in the Capital Projects window to indicate the assets you want to select.

Step 8: Interface Asset Lines to Oracle Fixed Assets

Your instructor will run the Interface Assets to Oracle Assets process to send the asset lines to Oracle Assets.

Step 9: Review Asset Information

After entering asset information and interfacing to Oracle Assets, review the asset information.

Step 10: Adjusting Asset Lines (Optional Exercise, Time Permitting)

Change the asset assignments and rerun the generate process.

Lab 1 Solutions: Creating a Capital Project

Step 1: Create a Capital Project

1. Choose the capital project template in the Projects, Templates Summary window. Your instructor will provide the template number.

2. From the navigator, choose Templates. This opens up the Find Projects window. In the Find Projects window, enter the project number. Select (B) Find.

3. Select (B) Copy To.

4. In the Project Quick Entry window, you should be able to enter the following data:

Field Name	Value	Required
Project Number	XX NEW LAB PROJECT	☑
Project Name	XX NEW LAB PROJECT	☑
Project Description	BUILD NEW LAB	☐
Organization	7000000000	☑
Project Manager	FRA1,	☑
		☐
		☐

OK   Cancel

5. Select (B) OK. This will copy the existing template to your new project number.

6. In the Projects, Templates Summary window, select your new project. Select (B) Open.

Lab 1 Solutions: Creating a Capital Project

N → Projects → Projects, Templates

B → Detail

Lab 1 Solutions: Creating a Capital Project

Step 2: Define Assets for Capital Projects

In this section, you will define the asset:

- Lab building

1. In the Options region of the Projects, Templates window, expand Asset Information and choose Assets then Detail.

2. Define these two assets for your project: Computer software and lab building.

   Note: Oracle Assets allows the creation of major and minor asset category flexfields. The "." separator indicates that this is a flexfield.

3. Complete the Asset window as follows:

Lab 1 Solutions: Creating a Capital Project

N → Projects → Projects, Templates → Assets

B → Detail

4. Save your work and close the Asset window.

Step 3: Setup Project Level Transaction Controls

1. In the Options region of Projects, Template window, choose Transaction Controls. Select (B) Details.

2. Enter the following transaction controls. Be sure to specify whether an item is capitalizable.

Lab 1 Solutions: Creating a Capital Project

3.   Save and close the window.

Step 4: Assign Assets to the Tasks

1.   In the Options region of the Projects, Templates window, choose Tasks. Select (B) Detail.

     Note: You will assign assets to the following task:

     Task 0160060000.2: Lab Building

2.   In the Tasks window, choose 0160060000.2 and select (B) Options.

3.   From the Task Options window, choose Asset Assignments.

Lab 1 Solutions: Creating a Capital Project

4.   Enter the following data in the Asset Assignments window for task 0160060000.2:
   –   Enable the Specific Assets radio button.
   –   Place your cursor on the Asset Name field and choose from LOV the asset.
   –   Select the Lab Building asset.

5.   Close the Asset Assignments window.

6.   Save the data and close the window.

Lab 1 Solutions: Creating a Capital Project

Step 5: Enter Usages Against Your Capital Project

1. From the Navigator, select Expenditures → Preapproved Batches → Enter.

2. Enter the following batch information in the Expenditure Batches window:

3. Select (B) Expenditures.

4. Enter a usage for your User #.

    In the Expenditures window enter the following:

Employee Name	Employee Number	Org.	Expenditure Date	Control Total	Control Count
User xx	<Defaults>	7000000000	<Defaults>	<Blank>	<Blank>

5. Place your cursor in the Expenditure Items region. Enter the following information:

Lab 1 Solutions: Creating a Capital Project

Date	Project No.	Task No.	Exp. Type	Organization	Qty	Descriptive Flexfield: Supplier Type
<Defaults>	xx New Lab Project	016006 0000.1	31780	7000000000	1500	Employee
<Defaults>	xx New Lab Project	016006 0000.2	31780	7000000000	2500	Employee

6. Save your work and close the Expenditures window.

7. Submit and release the Expenditure Batch. Close the windows.

Note: Your instructor will distribute and interface the usage costs and update summary amounts.

Lab 1 Solutions: Creating a Capital Project

Step 6: Place Assets in Service

1. From the Navigator, choose Capital Projects. Enter the project number in the Find Capital Projects window. Select (B) Find.

2. Select (B) Assets. This takes you to the Assets window, where you will see the assets you defined for this project. To place assets in service, tab to the Actual field in the Date In Service region, and enter today's date.

Lab 1 Solutions: Creating a Capital Project

Note: There are additional tabs. If you do not see the Date In Service fields when you first open this form, choose the Capitalization Details Tab.

3. Save and close the Assets window.

Lab 1 Solutions: Creating a Capital Project

Step 7: Generate Asset Lines

1. In the Capital Projects window, select (B) Generate. Specify the In Service Date Through to indicate the assets you want to select.

   Note: You must place assets in service before you can generate asset lines for them. Once asset lines have been created, you can review and adjust them, if necessary.

Lab 1 Solutions: Creating a Capital Project

Step 8: Interface Asset Lines to Oracle Fixed Assets

When you are ready, send the asset lines to Oracle Assets to become fixed assets, your instructor will run the Interface Assets to Oracle Assets process.

Lab 1 Solutions: Creating a Capital Project

Step 9: Review Asset Information

1. Navigate to the Capital Projects window. Enter the project number in the Find Capital Projects window. Select (B) Find then select (B) Assets.

2. Select (B) Asset Line to review your results.

3. Select (B) Details to view the detailed transaction for this asset amount.

   Note: If you need to manually allocate some amounts to multiple assets, notice that this is the form where you can split lines.

Step 10: Adjusting Asset Lines (Optional Exercise, Time Permitting)

1. Navigate to the Asset Assignments window.

2. Change the asset assignments.

3. Rerun the generate process.

Indirect Projects

Chapter 5

Indirect Projects

Section Objectives

At the end of this section, you should be able to:

- Create a project template

- Describe project classes and types

- Describe the purpose and uses of project and task configuration options

- Create an indirect project

- Create and modify a work breakdown structure (WBS)

- Set transactions controls

- Enter overrides for the project and its tasks

- Generate, View and Audit Reports

Section 1: Overview of Project Concepts

Project Definitions

```
                        ┌──────────────┐
                        │   Project    │
                        └──────┬───────┘
              ┌────────────────┴────────────────┐
        ┌─────┴─────┐                     ┌──────┴─────┐
        │  Task 1   │                     │   Task 2   │
        └─────┬─────┘                     └──────┬─────┘
       ┌──────┴──────┐                   ┌───────┴──────┐
   ┌───┴────┐   ┌────┴───┐          ┌────┴────┐   ┌─────┴────┐
   │Task 1.1│   │Task 1.2│          │Task 2.1 │   │ Task 2.2 │
   └───┬────┘   └────────┘          └─────────┘   └─────┬────┘
  ┌────┴─────┐                                 ┌────────┴────────┐
  │Task 1.1.1│                           ┌─────┴─────┐    ┌──────┴────┐
  └──────────┘                           │ Task 2.2.1│    │ Task 2.2.2│
                                         └───────────┘    └───────────┘
```

What Is a Project?

A *project* is a primary unit of work that can be broken down into one or more tasks or activities. A project is the unit of work for which you specify revenue and billing methods, invoice formats, a managing organization and project manager, and bill rate schedules. You can charge costs to a project, and you can generate and maintain revenue, invoice, unbilled receivable, and unearned revenue information for a project.

What Is a Work Breakdown Structure (WBS)

A project is organized into smaller, more easily manageable units called *tasks.* Every project has at least one task by default. A *work breakdown structure* (WBS) is a hierarchy of tasks. The WBS can be as simple or as detailed as you want it to be.

Project Classes and Project Types

Project Classes		Project Types
Indirect	→	**Bid and Proposal**
	→	**Overhead**
Capital	→	**Product Development**
Contract **(Project Billing Only)**	→	**Time and Materials**
	→	**Cost Plus**

- Project classes are predefined, but project types are implementation-defined

Project Classes

You can use three predefined project classes that track the following types of information:

- Indirect projects
    - Track overhead activities and costs.

- Capital projects
    - Track product/asset development activities and costs, and costs are capitalized as one or more assets.

- Contract (or direct) projects
    - Track activities, cost, revenue, and billing for work performed for and reimbursed by a customer.

Project Types

- Each project is classified by a project type.

Project Classes and Project Types

- The project type is the primary classification for the project.

- The project type provides controls on how projects are processed.

- Project types are defined during implementation.

- Project types can be used for AutoAccounting and reporting.

- The project type controls processing and defaults for a project.

Project Type Controls Processing and Defaults

Processing

The project type provides control on how costs are processed for a project.

- Whether to burden raw costs charged to projects.

- Classification of the project whether its an Indirect, Capital, or Contract Project.

- Whether to control budgeting options

Defaults

A project type provides control on how defaults are processed for project setup.

- The *Service Type* or broad category of work performed on the task. AutoAccounting uses Service Type to derive the Fund value. Therefore, Service Types must equal Fund Value for the Global AutoAccounting Rules.

- The Burden options, if you burden costs.

- The Budget Control Options, if you budget.

Indirect Projects

Use an indirect project type to collect and track expenditure items costs and labor hours for overhead activities.

Types of indirect projects can include:

- Overhead

- Administrative

- Marketing

- Bid and Proposal (B&P)

- Research and Development (R&D)

Examples

- A Time Off Project is an overhead project that may be created to track sick leave, vacation, holiday, and so on. In this type of project, tasks can be used to track different types of time off.

- A Bid & Proposal Project may be the type of project in which the total proposal cost may exceed a predefined amount, or the proposal costs may be recovered if the project is awarded.

Section 2: Creating and Configuring Project

The following describes the header fields you enter to create an indirect project in the Projects Templates window.

Number

This is a unique identification number used to find and identify the project. The project number method, automatically generated or manually entered, is determined in the Implementation Options at setup. (*Project templates* are always numbered *manually*). DELPHI recommends preceding the unique identification with your OMB ID. This will keep all your templates and projects segregated from other OAs.

> **Note:** A project number cannot be modified after expenditure items, requisitions, purchase orders, or supplier invoices are charged to a project.

Section 2: Creating and Configuring Projects

Name

A unique, short, descriptive name to identify the project.

Type

The **Indirect** project type collects and tracks expenditure item costs and labor hours for overhead activities, such as administrative and overhead work, and bid & proposal preparation.

Organization

The managing "owning" organization of a project used for reporting and AutoAccounting purposes. You can choose any organization that has the following characteristics:

- The organization belongs to the *project/task organization hierarchy* assigned to the operating unit.

- The organization has the *project/task owning organization classification* enabled.

- The project type class is permitted to use the organization to create projects. This permission is determined when you define the organization.

- The organization is active as of the system date.

Duration

The duration is the start date and completion date of the project. The start date and completion date, or just the end date, can be left blank, but you must enter a start date if you want to enter a completion date.

Section 2: Creating and Configuring Projects

Status

The project status indicates the current status of the project. The project status can be used to control what processing is allowed at various stages of a project. For example, you can control whether new transactions can be charged to a project with a certain project status. Every project must have a valid status.

- The following are predefined project statuses:
    - Unapproved
    - Submitted
    - Approved
    - Rejected
    - Pending Close
    - Closed
    - Active

Description

A brief description of the project.

Workflow in Process Checkbox

The Workflow in Process checkbox is enabled based on the project type selected. DELPHI is not using the checkbox. It should remain unchecked.

Public Sector Checkbox

Use the Public Sector checkbox to indicate whether a project is a private or public sector project. Use this for reporting and AutoAccounting purposes. DELPHI is not using this checkbox for autoaccounting.

Project Templates and Quick Entry

- Project template
    - All projects originate from a template.
    - Simplifies the project setup process
    - Copies the project, the WBS, and can be created to copy commonly used project and task options
    - Can create a new project by copying from a project template or an existing project.

- Quick Entry
    - Provides a way to enter variable project information that may change between projects
    - Provides a way to override certain values defined for the project template

Key Members

Key Members

Key members are employees who can:

- Enter and maintain project data

- View labor cost details charged to the project (based on project role type definition)

Key member information:

- Employee name and number

- Project role type (defined during implementation)

- Each project can have only one project manager at a time.

Examples of Key Members

- Project Manager

- PA Systems Accountant

- PA Accounting Supervisor

Cross-Project Security in Oracle Projects

You can also define responsibilities for cross-project users who are able to enter and maintain project data even if they are not assigned as key members.

Classification Information

Classification Information

- You classify projects based on implementation-defined classification categories and codes.

- You can use these codes as a parameter for AutoAccounting, as well as for reporting and analysis.

Examples of Class Category and Class Codes

Work Breakdown Structure

A work breakdown structure (WBS) is a task tree

showing the organization of project work.

```
                      Project
              ┌──────────┴──────────┐
           Task 1                Task 2
        ┌─────┴─────┐        ┌─────┴─────┐
     Task 1.1   Task 1.2  Task 2.1   Task 2.2
        │                              │
     Task 1.1.1                    Task 2.2.1
```

Defining Work Breakdown Structure (WBS)

You can define the WBS to be as simple or as detailed as you choose. You use the WBS to track project progress.

- No limit to number of tasks and levels

- Flexible task numbers and names

- Tasks are processed in the order of their position in the WBS.

- Three distinct positions:
    - **Top Task**: A task whose parent is the project
    - **Mid Task:** A task that is not a top task or a lowest task
    - **Lowest Task** A task that is at the bottom of the WBS, without any child tasks

Work Breakdown Structure

```
                         ┌──────────────┐
                         │   Projects   │
                         └──────┬───────┘
            ┌───────────────────┼───────────────────┐
    ┌───────┴───────┐   ┌───────┴───────┐   ┌───────┴───────┐
    │    Task 1     │   │    Task 2     │   │    Task 3     │
    │   Top and     │   │   Top Task    │   │   Top and     │
    │  Lowest Task  │   │               │   │  Lowest Task  │
    └───────────────┘   └───────┬───────┘   └───────────────┘
            ┌───────────────────┼───────────────────┐
    ┌───────┴───────┐   ┌───────┴───────┐   ┌───────┴───────┐
    │   Task 2.1    │   │   Task 2.2    │   │   Task 2.3    │
    │  Lowest Task  │   │   Mid Task    │   │  Lowest Task  │
    └───────────────┘   └───────┬───────┘   └───────────────┘
                    ┌───────────┴───────────┐
            ┌───────┴───────┐       ┌───────┴───────┐
            │   Task 2.2.1  │       │   Task 2.2.2  │
            │  Lowest Task  │       │  Lowest Task  │
            └───────────────┘       └───────────────┘
```

A top task can also be considered a lowest task, if the task does not have any child tasks. Tasks 1 and 3 are lowest tasks as well as top tasks. Tasks 2.1 and 2.3 are lowest tasks although they are on the same level as Task 2.2, which is a mid task. A task that is the child of another task is commonly referred to as a subtask.

Processing by Task Levels

Tasks can be used and processed based on their location in the WBS.

- Top tasks
  - Budgeting
  - Rollup Reporting

- Middle tasks
  - Rollup Reporting

- Lowest tasks
  - Budgeting
  - Transaction Entry
  - Override Entry

Examples of Task Levels:

Basic Task Information

Basic Task Information

- Information defined for all tasks
  - Number
  - Name
  - Description (optional)
  - Task manager (optional)

- Information defaulted from project or parent task
  - Owning organization
  - Start/completion dates
  - Service type

Task information not at the project level–chargeable checkbox:

- Specifies whether lowest task can be charged

- Defaults to allow charges for lowest tasks; defaults to parent task value for middle tasks

- Automatically unchecks for parent tasks when subtasks are created

Changing Default Task Information

You can override the default task information.

- **Default information is used for new subtasks.**

- **Changes do not cascade to existing tasks.**

Example

- Task 1: No detail change
- Task 2: Changed before subtasks created
- Task 3: Changed after subtasks created

```
                    ┌─────────────────┐
                    │    PROJECT      │
                    │ Org = Environ.  │
                    └─────────────────┘
        ┌───────────────────┼───────────────────┐
 ┌─────────────┐     ┌─────────────┐      ┌─────────────┐
 │   Task 1    │     │   Task 2    │      │   Task 3    │
 │Org = Environ.│    │ Org = Elect. │      │ Org = Elect. │
 └─────────────┘     └─────────────┘      └─────────────┘
        │            ┌───────┴───────┐            │
 ┌─────────────┐ ┌───────────┐ ┌───────────┐ ┌─────────────┐
 │     1.1     │ │    2.1    │ │    2.2    │ │     3.1     │
 │Org = Environ.│ │Org = Elec.│ │Org = Elec.│ │Org = Environ.│
 └─────────────┘ └───────────┘ └───────────┘ └─────────────┘
```

Task Numbering and Naming

Task Numbering and Naming

- Tasks are indented to indicate their location in the WBS.

- The Task Number field is used as a sort key within a task level for reporting purposes.
    - Alphanumeric
    - Numbers precede letters

Note

If the WBS has more than 10 tasks, you must always use a leading zero for single-digit numbers. Oracle Projects displays your tasks as follows: 01, 02, 03…, 09, 10, 11.

Examples

Structure

1
1.1   1.2
1.1.1   1.1.2

Display:
(sorted numerically)
1—>1.1—>1.1.1—>1.1.2—>1.2

Structure

Project
Phase 1   Phase 2
Design   Build   Test

Display:
(sorted alphanumerically)
Phase 1: Build, Design, Test

Transaction Controls

In the Transaction Controls window, you list controls based on the Limit to Transaction Controls checkbox:

- Checked = Inclusive limit to transaction controls

Allows only charges that are included on the list. Anything not listed is not chargeable.

- Unchecked = Exclusive limit to transaction controls

Specifies charges that are not allowed. Anything listed is chargeable.

You can control exceptions to any rule using the Chargeable checkbox.

Logic of Transaction Controls

- You can enter transaction controls for both project and lowest task.

- Task transaction controls override project transaction controls.

- Priority of processing if there is more than one applicable row:
    - Person-Expenditure category-Expenditure Type (NLR)
    - Person-Expenditure category
    - Person
    - Expenditure category-Expenditure type-(NLR)
    - Expenditure category

Transaction Control Extensions

Transaction Control Extensions

- An extension increases software functionality to implement and automate agency-specific business rules without customizing the software.

- You use transaction control extensions to define cross-project charge control rules that validate agency-specific policies for expenditure entry.

Examples

- You cannot charge new items to a project with a status of *processing only.*

- You can charge only to those tasks managed by your organization.

Burden Multipliers

- A burden multiplier applies to a raw cost amount to reflect the actual cost of doing business. These extra costs include employee benefits, office space, and so on.

- A cost burden schedule is an implementation-defined set of burden multipliers used for costing to derive total cost amounts. You can apply costing burden schedules across projects.

- Burden schedule overrides are revisions to the burden schedule attached to the project. When you define project types at implementation, you decide whether overrides will be allowed for each project type.

Review of Project Definition

Summary of data elements and options available for indirect projects and tasks.

Level at Which Entry is Allowed

Project/Task Options	Project	Top Task	Middle Task	Lowest Task
Classification	X			
Customers and Contacts	X			
Key Members	X			
Organization Override	X			
Resource List Assignments	X			
Transaction Controls	X			X
Burden Multipliers				
Costing Burden Schedule	X Default	X Default	X Default	X Default
Burden Schedule	X			X

Review of the Steps to Create a New Project

1. Create a new project by copying from a project template or an existing project.

2. Enter basic project information. Enter project information that defaults to tasks.

3. Specify project tracking information

4. Key members

5. Classifications

6. Define the WBS: Task Options.

Review of Project Definition

7. Define additional project/task information to manage and process the project:
    – Transaction controls
    – Costing overrides
    – Other

Reports for Project and Task Setup

You can verify project and task setup with these reports:

- Project Configuration Report

Displays project detail information and project overrides.

- Task Details Report

Displays task detail information and task overrides.

- Work Breakdown Structure (WBS) Report

Displays hierarchical format of work breakdown structure.

Section 3: Maintaining Projects and Tasks

Comprehensive online inquiry and reporting		
Identify business terms and rules	**Define projects**	**Collect costs**
	Enter project	

Maintain Projects and Tasks   **Adjustments**

Indirect Projects

Changing the Project Information

Changing the Project Information

You can make two types of changes to project information, unrestricted and conditional, depending on the type of information:

- Unrestricted changes:
  - Name
  - Description
  - Status
  - Public sector
  - Start date: Must be on or before any task start date; will not change existing task attributes

- Completion date: Must be on or after any task completion date; will not change existing task attributes

- Project organization
  - Change is allowed only before transactions are charged to a project.
  - Change is allowed to retain an audit of transactions that are determined from this data using AutoAccounting Rules.

Conditional changes:

- Project number
  - Change is allowed only before transactions are charged to a project. Transactions include timecards, expense reports, usage logs, supplier invoices, purchase orders, requisitions, and events.
  - Change is allowed only if manual project numbering is used.

- Project type: Change is allowed only before transactions are charged to a project.

Changing the Task Information

You can apply the following types of changes to a task definition:

Unrestricted changes:

- Task name

- Description

- Start date: Must be on or after project start date; will not change existing task attributes

- Completion date: Must be on or before project completion date; will not change existing task attributes
    - Task manager
    - Task service type

Conditional changes:

- Task number: Change is allowed only before transactions are charged to a task.

- Task organization: Change is allowed only before transactions are charged to a task. Change is allowed to retain an audit of transactions that are determined from this data using AutoAccounting Rules.

- Chargeable checkbox: Change is allowed only at the lowest task.

Changing the WBS

You can make the following types of changes to the WBS:

- Adding a task: Can add any task without overrides or transactions.

- Deleting a task: Can delete any task without transactions, subtasks, or budget amounts. You will delete overrides when the task is deleted.

- Changing the task level: Cannot be done directly, but it can be done by creating a new desired structure. This may require the transfer of any items that are charged to old tasks.

Changing the Project Statuses

To change the status of a project, choose Change Status. The following rules determine if the status change is allowed:

- The project must have class codes entered for all required class categories.

- If the project is a contract project, the project must have at least one customer, and the total billing contribution must equal 100%.

- Each project customer for the project must have at least one billing contact defined.

- The project must have a project manager assigned to it.

In addition to these rules, Oracle Projects provides a client extension, the Project Verification Extension, that you can use to define additional rules you want to apply for changing the project status of a project.

Summary

This lesson described how to perform these tasks:

- Describe project classes and types

- Create a new indirect project

- Create a WBS

- Enter the appropriate project information

- Apply transaction controls

- Specify a cost burden schedule

- Maintain projects

Project setup drives processing of transactions charged to the project.

You define a project and a WBS to record work and process transactions as you and your company require.

Project definition can be simple or complex, depending on your requirements.

- Key members

- Classification information

- Work breakdown structure

- Charge controls

- Costing overrides

- Other

For further information, see the following topics in the Online Help Desk.

- Setting Up an Indirect Project Type

Summary

- Defining Required Project Information

- Creating New Projects

- Defining Quick Entry Fields

- Changing Status of a Project

- Establishing Key Member Information

- Establishing Template Classification Information

- Establishing task Information in Projects

- Establishing Template Transaction Controls

- Establishing Template Organization Overrides

- Defining or Changing Project Statuses

Lab 1: Creating a Project

Instructions

Jo Trng1, a project manager, wants to design and develop a new Audio/Video system for the videoconferencing manufacturing company, Picture Tel.

Jo asks you, her PA Accounting Supervisor, to create a project in Oracle Projects to track the costs involved in researching and developing this project.

To begin with, you must have a template that you can copy from. Templates are usually created for your organization at implementation, but you create a basic template in this lab that is used throughout the labs.

To create a project, you must use the following information for each step:

Step 1: Creating a Project Template

1. Enter the following basic header information:

    *   Template number: TxxResearch&Development

    *   Template name: xxResearch&Development

    *   Type: R&D

    *   Organization: 4042000000

    Note: xx is your student number (the user number which your instructor has assigned you).

    Because this is an indirect class project type, you must turn off some of the options that will not be used:

    *   Organization Overrides

    *   Asset Information

Lab 1: Creating a Project

- Billing Information

- Bill Rates and Overrides

2. Enter the following information to setup the quick entry list:

Order	Field Name	Specification	Required
30	Organization	<Blank>	Yes
40	Key Member	Project Manager	Yes
50	Project Start Date	<Blank>	Yes

Note: The Project Number and Project Name fields are already listed. These fields are required for all templates. Beginning w/Order 30, you must add the project template information.

Step 2: Creating a New Indirect Project by Copying from a Template

Create a new indirect project called xxR&D, using the project template you just created. You need to find the TxxResearch&Development Template in the Projects, Templates Summary window and copy it to create a new project.

Enter the following basic project information:

- Project number: xxR&D

- Project name: xxR&D

- Organization: 4042000000

- Project Manager: TRNG1, JO

- Project Start Date: Current Date

- Project Completion Date: Current Date plus 6 months

Lab 1: Creating a Project

Step 3: Defining the Project Key Members Name and Role

- Project Manager: Jo Trng1

  Since the Project Manager was defined in the Quick Entry window as on of the Key Members, no entry is necessary.

- Key Member Name: Your student name

- Key Member Title: PA Accounting Supervisor

Step 4: Entering a Classification for AutoAccounting Needs

- Category: FUNDING SOURCE

- Class code: FEDERAL-DOT

- Code description: FUNDING SOURCE DOT-FEDERAL AGENCY

Step 5: Creating Tasks and Subtasks

Before you start entering the task and subtask information to the related window, you must create the work breakdown structure (WBS) and the task list that show the task number and the task name and the relationships between activities.

Lab 1: Creating a Project

Task Number	Task Name
0101050000	BPAC
0101050000.1	Preliminary
0101050000.2	Final Draft
0101050000.2.1	Document Final Draft
0101050000.2.2	Final Review

Note: When using this numbering convention, you can easily determine the relationships between tasks. For example:

- task 0101050000.2 is the parent of subtasks 0101050000.2.1 and 0101050000.2.2, and

- the top task of this project is a BPAC value used for the DELPHI Global AutoAccounting Rules.

Step 6: Entering Task Details Information

- Task manager: TRNG8, JO

Step 7: Entering Transaction Controls to the Tasks

Scenario: Prevent Labor cost for object class 12200 and Supplies/Materials cost for object class 26300 from being charged to task 0101050000.2.2.

Step 8: Generating Reports to Verify Project Setup

Run the following reports to verify that your project configuration and work breakdown structure are correct:

- AUD: Project Configuration

- AUD: Task Details

- AUD: Work Breakdown Structure

Lab 1: Creating a Project

Step 9: Viewing the Status of the Concurrent Requests

1. Navigate to the Find Request window from the Navigator.

2. View the status of the concurrent requests.

    If the status is not *Completed*, select (B) Refresh Data until the status is completed.

3. View the report from the request window.

Step 10: Auditing Reports

Analyze the generated reports to ensure that your project setup and your work breakdown structure are correct. If you detect errors, go back to the Projects, Templates window and correct the errors.

You must detect any errors in your task setup now or you may encounter data problems in subsequent exercises that use these tasks.

Reference: For more information on detailed design considerations/information, see *Advanced Topics*.

Lab 1 Solutions: Creating a Project

Step 1: Creating a Project Template

1. From the Navigator, expand Setup, expand Projects, and select Project Templates (B) Open.
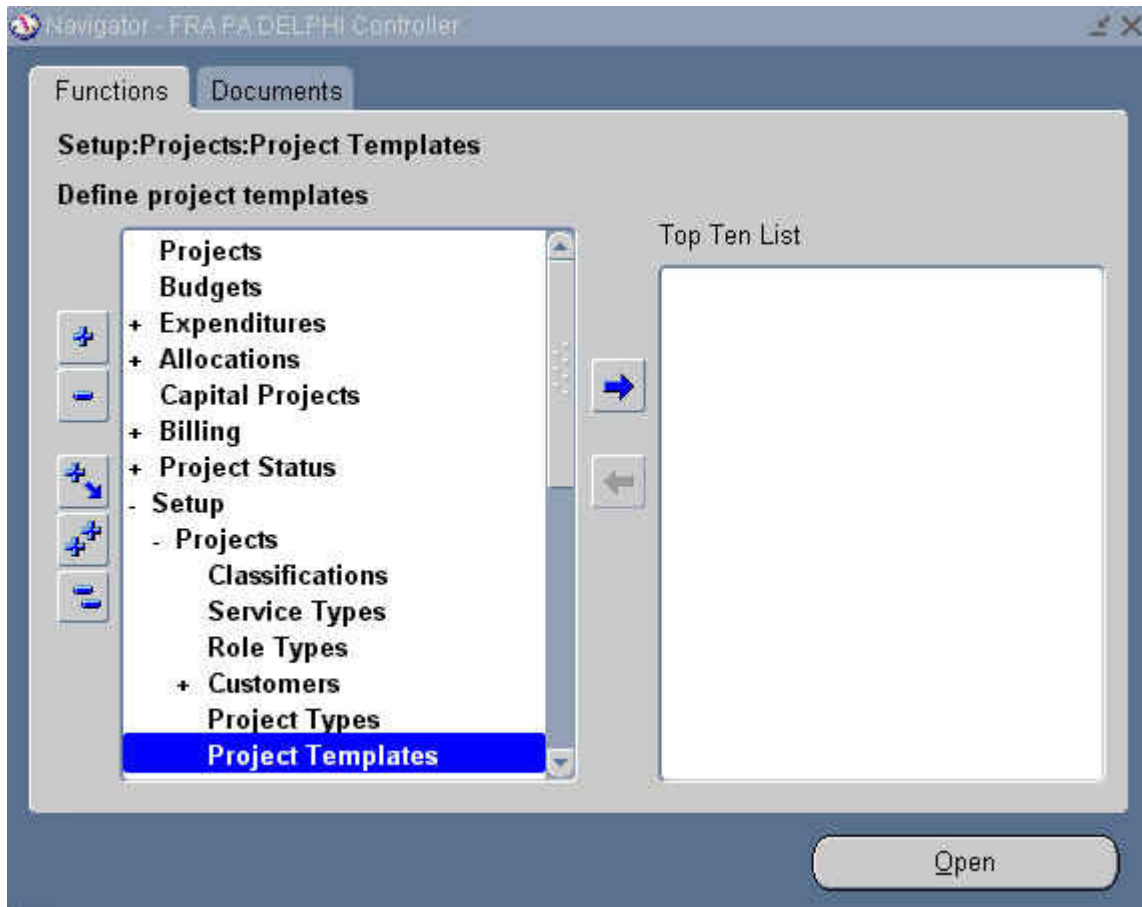
Navigator

(N) Setup → Projects → Project Templates

(B) Open

Lab 1 Solutions: Creating a Project

(B) NEW

2. Since you are creating a new template, select (B) NEW from the Find Projects window. This takes you into the Projects, Templates window.

Lab 1 Solutions: Creating a Project

Projects, Templates

3. Create your new template by entering the following basic information:
    – Template number: TxxResearch&Development
    – Template name: TxxResearch&Development
    – Type: R&D
    – Organization: 4042000000
    – Description: Optional

    Note: xx is your student number (the user number which your instructor has assigned you).

Lab 1 Solutions: Creating a Project
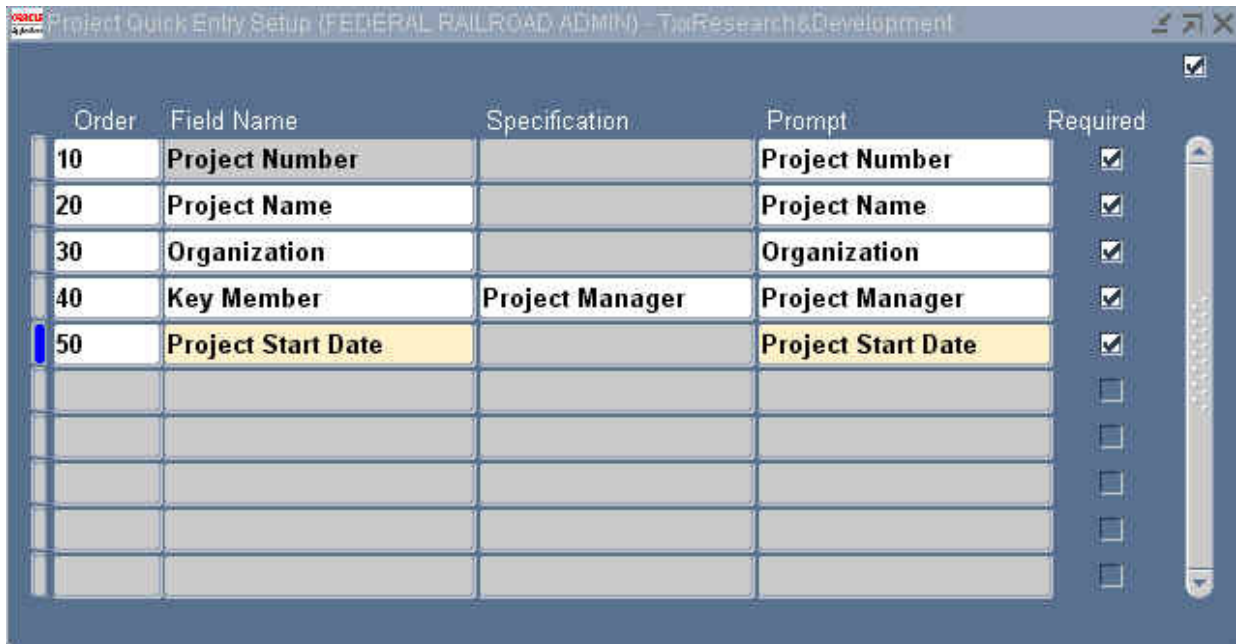
Because this is an indirect class project type, you must turn off some of the options that will not be used. In the Options area, deselect the Show checkbox for the following:

- Customers and Contacts

- Organization Overrides

- Asset Information

- Billing Information

- Bill Rates and Overrides

4. Select (B) Setup Quick Entry

    Notice that the Project Number and Project Name fields are already listed. These fields are required for all templates. Beginning with Order 30, add:

Lab 1 Solutions: Creating a Project

Project Quick Entry Setup

(B) Setup Quick Entry

> Note: The *Required* checkbox must be enabled for the field to be included in the quick entry form.

5.   Save your work and close the form.

(M) File: Close Form

6.   Collapse the master list in the Navigator (select the double-minus sign icon). Now you can proceed to create a project.

Lab 1 Solutions: Creating a Project

Step 2: Creating a New Indirect Project by Copying from a Template
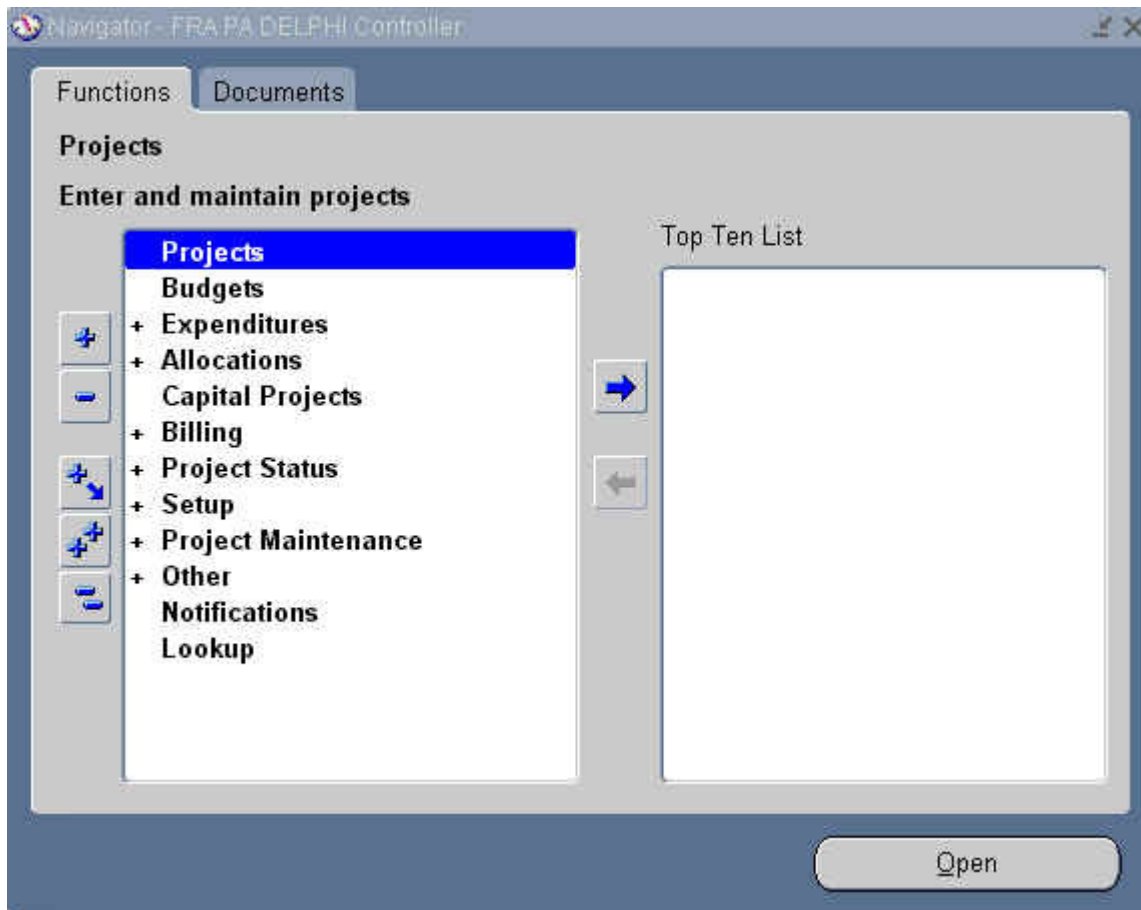
Navigator

(N) Projects

(B) Open

1.   From the Navigator, select Projects (B) Open.

Lab 1 Solutions: Creating a Project

Find Projects

(B) Find

2. In the Find Projects window, enter your template number (TxxResearch&Development) in the Project Number field. Select (B) Find.

Lab 1 Solutions: Creating a Project

Projects, Templates Summary

(B) Copy To

3. Create your new project by copying from the project template. In the Projects, Templates Summary window, find the template you just created and select (B) Copy To

Lab 1 Solutions: Creating a Project

Project Quick Entry

4. Enter project information in the Project Quick Entry window.

5. Select (B) OK.

Lab 1 Solutions: Creating a Project

Projects, Templates Summary

6.   In the Projects, Templates Summary window, select your project and (B) Open.

Step 3: Defining the Project Key Members Name and Role

The Project Manager has been defined in the Quick Entry window as one of the project key member roles. In the Key Members window, enter your Student employee name as the PA Accounting Supervisor.

1.   Navigate to the Key Members window. In the Project Options area, choose Key Members and select (B) Detail.

Lab 1 Solutions: Creating a Project

Key Members

2. Enter your name as the PA Accounting Supervisor.

3. Save your data and close the Key Members window.

Step 4: Entering a Classification for AutoAccounting Needs

1. In the Options area of the Projects, Templates window, choose Classifications and select (B) Detail.

Lab 1 Solutions: Creating a Project

2. Enter the following information in the Project Classifications window.

Project Classifications

3. Save your data and close the Project Classifications window.

Step 5: Creating Tasks and Subtasks

Before you start entering the task and subtask information to the related window, you must create the work breakdown structure and the task list that show the task number and task name and the relationships between activities (toptask, lowertask).

> **Note:** DELPHI AutoAccounting requires top task to equal your BPAC value.

Task Number	Task Name
0101050000	BPAC
0101050000.1	Preliminary
0101050000.2	Final Draft
0101050000.2.1	Document Final Draft
0101050000.2.2	Final Review

Lab 1 Solutions: Creating a Project

When using this numbering convention, it is easy to distinguish the relationships of tasks. Task 0101050000.2 is obviously the parent of subtasks 0101050000.2.1 and 0101050000.2.2.

1. In the Project Options area of the Projects, Templates window, select Tasks and (B) Detail.

2. In the Tasks window, create the top task by replacing the default values with Task Number 0101050000 and Task Name BPAC.

3. Create subtask 0101050000.1 by selecting (B) Create Subtasks. Enter the task name and description.

    Note: Your cursor must be on the line for task 0101050000 when you select (B) Create Subtasks, so that the system will know for which task to create the subtask.

Lab 1 Solutions: Creating a Project

4. Enter task 0101050000.2

There are three ways to create subtask 0101050000.2:
- − With the cursor on subtask 0101050000.1, select (B) Create Peer Task.
- − With the cursor on task 0101050000, select (B) Create Subtasks.
- − With your cursor on subtask 0101050000.1, press your down arrow key to get to a new line.

Note: Your cursor must be placed on the line of the task for which you are creating a peer, so that the system will know what level of task to create.

Task Number	Task Name	Description	Start Date	Completion Date	[ ]
0101050000	BPAC	BPAC	01-APR-2000		
0101050000.1	Preliminary	Preliminary	01-APR-2000		
0101050000.2	Final Draft	Final Draft	01-APR-2000		
0101050000.2.1	Document Fin	Document Final Draft	01-APR-2000		
0101050000.2.2	Final Review	Final Review	01-APR-2000		

Tasks (FEDERAL RAILROAD ADMIN) - XX:R&D

Options   Create Subtask   Create Peer Task

Lab 1 Solutions: Creating a Project

5. Create subtask 0101050000.2.1 and 0101050000.2.2:
   − With the cursor on task 0101050000.2, select (B) Create Subtasks.
   − With your cursor on subtask 010105000.2.1, press your down arrow key to get to a new line.

   Note: Your cursor must be placed on the line of the task for which you are creating a peer, so that the system will know what level of task to create.

6. Save your data.

   Note: Remain in the Tasks window for the next exercise.

Step 6: Entering Task Details Information

1. In the Tasks window, with the cursor on task 0101050000.1, select (B) Options. Within the Task Options window, choose Task Detail by double-clicking.

Lab 1 Solutions: Creating a Project

2. Enter TRNG8,JO as the task manager.

    Note: Notice the fields in this window already include default data displayed in them, which default from the project level when you first save it. You can override these project-defaulted values; however, any overrides entered here affect only the current task and any new subtasks that you define below it. For now, accept all of the default values unless instructed to do otherwise.

3. Save your data and close the Task Details and Task Options windows.

Lab 1 Solutions: Creating a Project

4. In the Tasks window, with cursor on task 0101050000.2.1, select (B) Options. In the Task Options window, choose Task Details by double-clicking.

5. Enter TRNG2,JO as the task manager.

6. Save your data and close the Task Details and Task Options windows.

7. In the Tasks window, with your cursor on task 0101050000.2.2, select (B) Options. In the Task Options window, choose Task Details by double-clicking.

Lab 1 Solutions: Creating a Project

Step 7: Entering Transaction Controls to the Tasks

Task 0101050000.2.2 Scenario

Prevent Object Classes 12200 and 26300 from being charged to task 0101050000.2.2.

1. Navigate to the Transaction Controls window for task 0101050000.22. In the Tasks
    window, with your cursor on task 0101050000.22 select (B) Options. In the Task Options
    window, choose Transaction Controls by double-clicking.

Lab 1 Solutions: Creating a Project

2. Leave the Limit to Transaction Controls check box blank.

    Enter the following information:

Transaction Controls

3. Save your data and close all windows.

Step 8: Generating Reports to Verify Project Setup

Run the following reports to verify that your project configuration and work breakdown structure are correct.

Lab 1 Solutions: Creating a Project

1. From the Navigator, expand Other, expand Reports, select Run and (B) Open.
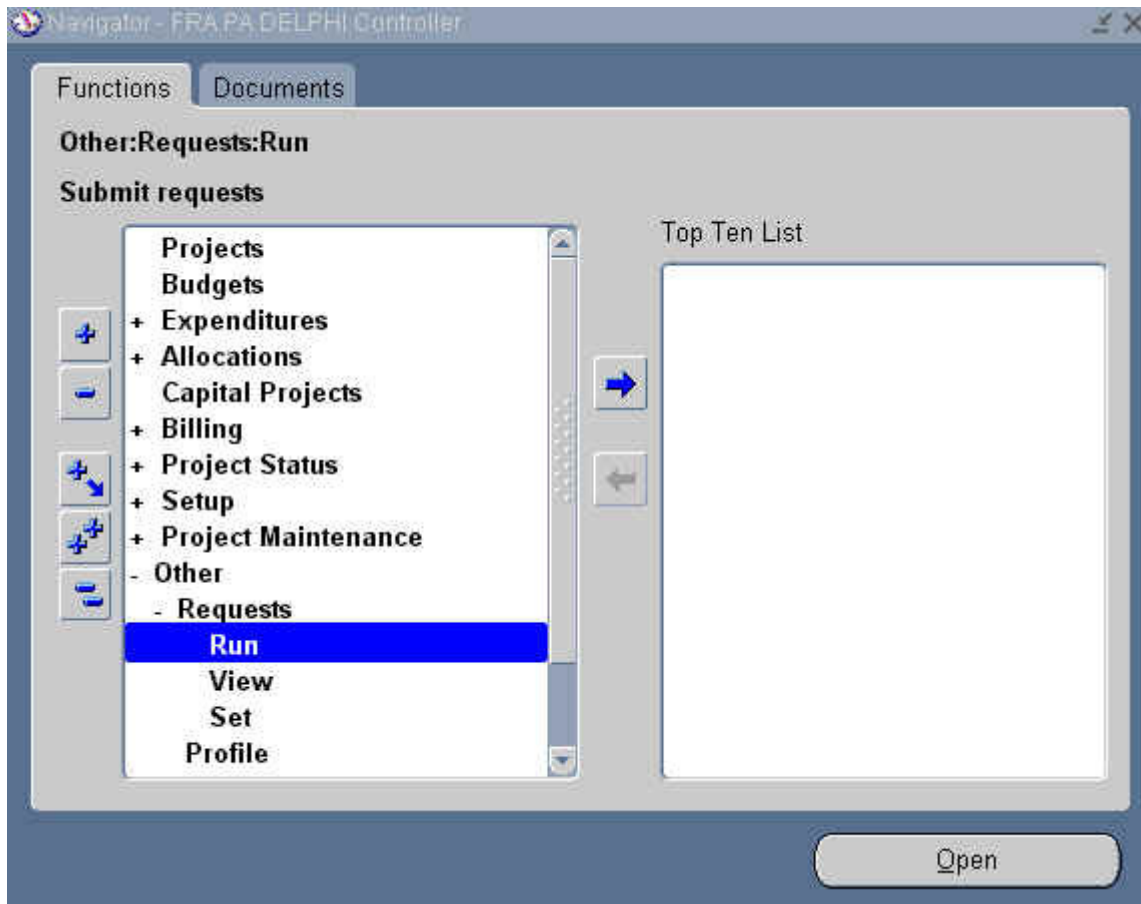
Navigator

(N) Other → Requests → Run

(B) Open

Lab 1 Solutions: Creating a Project
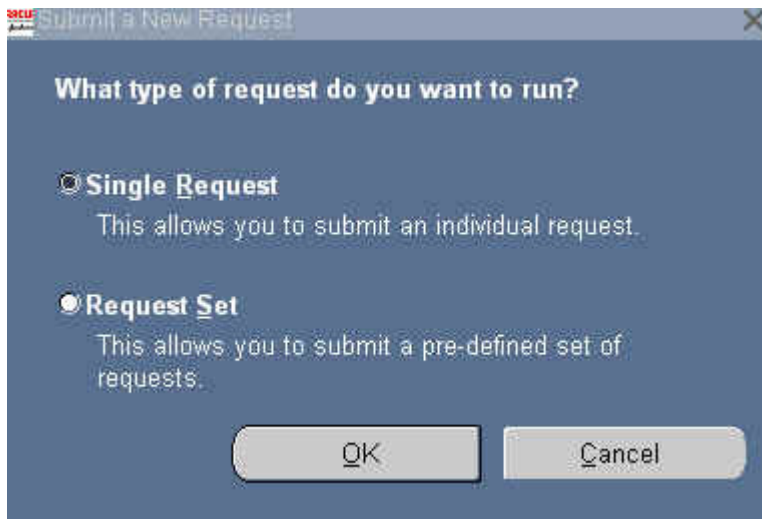
Submit a New Request

2. In the Submit a New Request window, select (B) OK.

   Note: Single Request is the default.

Lab 1 Solutions: Creating a Project

Submit Request

3.   In the Submit Request window, with your cursor in the Request Name field, from the List of Values by selecting Ctrl L, choose AUD: Project Configuration.

Lab 1 Solutions: Creating a Project

Submit Request - Parameters

4.   With your cursor in the Parameters field, from LOV, choose your project. Select (B) OK.

Lab 1 Solutions: Creating a Project

Upon Completion

5. When the Parameters window closes, select (B) Completion Options. In the Printer field of the Print the Output To: area, select a printer from the LOV if one isn't already listed. Select (B) OK.

Lab 1 Solutions: Creating a Project

Submit Request

6.   From the Submit Request window, select (B) Submit.

Note: The Request window will automatically open.

Lab 1 Solutions: Creating a Project

Requests

7. From the Request window, if the phase field is *Pending* select (B) Refresh Data until the field changes to *Completed.*

8. Retrieve the Project Configuration report from the printer and/or view the information online by selecting (B) View Output.

9. From the Request window, select (B) Submit a New Request

10. Submit the AUD: Task Details Report for your project.

    Starting at Step 3, follow the same instructions as above, except in Step 3 enter AUD: Task Details as the Request Name.

Lab 1 Solutions: Creating a Project

11. Submit the AUD: Work Breakdown Structure Report.

   Starting at Step 3, follow the same instructions as above, except in Step 3 enter AUD: Work Breakdown Structure Report in the Request Name.

Step 9: Viewing the Status of the Concurrent Requests

1. From the Navigator on the menu bar, select Help: View My Requests.

Navigator

(M) Help: View My Requests

2. Select (B) Find to view *All My Requests*.

Lab 1 Solutions: Creating a Project

3.   Verify that the reports have been completed. If the status of your request is not yet complete, you may re-query the status by selecting (B) Refresh Data.

Lab 1 Solutions: Creating a Project

Step 10: Auditing Reports

Analyze the generated reports to ensure that your project setup and your work breakdown structure (WBS) are correct. If you detect errors, go back to the Projects, Templates window and correct the errors.

It is important that you detect any errors in your task setup now or you may encounter data problems in subsequent exercises that use these tasks.

1. Navigate to the Request window one of two ways:

   - (N) Other → Requests → View

   - (M) Help: View My Requests

   - (B) Find

2. Place your cursor on the report you wish to view and select (B) View Output.

   Complete *Cost Budgets LAB0867Z*